PH-AAA-057

COMPREHENSIVE REPORT

COST STUDY OF A SAMPLE OF THE GRANTEES OF THE NATIONAL CENTER FOR FAMILY PLANNING SERVICES

CONTRACT HSM 110-71-219

by

WESTINGHOUSE POPULATION CENTER

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The project upon which this report is based was performed pursuant to Contract Number HSM 110-71-219 with the Health Services and Mental Health Administration, Department of Health, Education and Welfare. It reflects the views of the Contractor and not necessarily those of the United States Government. Any errors or omissions should be brought to the attention of the Westinghouse Population Center.

C O N T E N T S

EXECUTIVE SUMMARY

A. Purpose of Study

This report presents the data and information prepared by the Westinghouse Population Center as part of a study of a statistically representative sample of Family Planning Programs funded by the National Center for Family Planning Services. The study was undertaken to identify, based upon existing data and records, the total costs for delivering family planning services regardless of funding source. The study also determined the feasibility of installing and utilizing some type of standard national family planning cost reporting system.

B. Methodology

The operational and organizational characteristics of the various programs funded by NCFPS were identified and categorized. The projects were then grouped according to these program characteristics. A sample was then drawn of twenty-four grantees comprising thirty-nine service providing organizations. This sample is statistically representative of the different types of programs funded by NCFPS. With a high degree of confidence the cost data gathered from the sample can be considered representative of the costs for all NCFPS funded family planning programs. This consideration serves planning and comparative purposes.

Intrinsic to the study was the development of a descriptive model which delineated all of the activities or functions performed by family planning programs. It attributed personnel, equipment, space and supply costs to these activities. Thus the total cost of providing services could be ascertained.

The information and data for the study were collected by WPC professional staff who visited each of the grantees and service providers in the sample. The data were gathered for the most recent twelve month period for which complete fiscal and program information was available. Only those costs which related to the performance of the activities during the study period were included in the study. Because of the wide variation in both the availability and quality of data and records maintained by the sample grantees, it was not possible to obtain complete cost-activity information from every grantee. There was, however, sufficient data available to make statistically valid observations on the costs of family planning programs.

As with any data, usage should be based upon a complete understanding of the methodologies employed to collect and analyze it, as well as the basic limitations of the source material. These factors are fully documented in the balance of this report.

C. General Findings

The programs visited were located throughout the United States and represented a variety of organizational affiliations and styles. To insure comparability of data, the information was collected from the grantees by service providing organizations. To insure the validity of the comparative analysis, the Westinghouse Population Center based its analysis on the separable service providers, also called programs here. These are units of one or more service providers which are inseparable.

The aim of the cost survey was to identify the total cost of service provision. Thus in addition to the expenditures from the grantees' records, the value of volunteer and donated resources, not used for matching purposes, was counted as a portion of the total cost. For any activity which is a component of a family planning program, there are two meaningful cost measures: direct and total costs. The direct cost of a component activity represents only those costs which are directly chargeable to that activity, including direct,volunteer and donated resources. The total cost of an activity includes its share of all supportive, or overhead functions. In general the first is used to determine the internal cost structure of the program; the second, the actual cost of service provision.

Words of caution must be added here concerning the range of values WPC found and the averages derived from them. For many of the variables the large range of values resulted from the

vast differences in organizational characteristics, style, setting, and goals. The accounting structure used for this cost study represents the tree-like relationship of the component activities. Due to variances in the information, one finds that higher degrees of aggregation of activities are associated with higher confidence in the data. It was unavoidable to use, in some cases, data at lower levels of aggregation. In these cases, there is undoubtedly more confidence in the average than in the extremes of the range. (See page 71.)

There are two types of averages that can be computed for the programs' cost per patient indicators. These are the program and patient averages. The differences between them are illustrated in the following example:

Program #	Patients	Cost per Patient
1	1,000	$1
2	100	$10

program average: $\frac{\$10 + \$1}{2} = \$5.5$

patient average: $\frac{1{,}000 \times \$1 + 100 \times \$10}{1{,}000 + 100} = \$1.8$

In general, the program average is best used to compare different programs; the patient average, to predict service levels attainable with given resources.

The year in which family planning services were first provided by the grantees WPC studied ranged from 1935 through 1970.

The total cost of providing services for the twelve month study period varied between $60,000 and $1,250,000. These programs saw an average 2,723 new patients during the study year. Their annual unduplicated patient count ranged from 481 to almost 13,000, averaging about 5,000. Each of these patients visited the program about twice a year. In the average program, services are provided to these patients during fifty-four sessions per month at eight clinic sites.

The total cost for the average program is about $314,000. Approximately 15% of this cost -- personnel, equipment, facilities, and supplies -- were provided by sources external to the program and did not appear in the grantee's records. The largest single cost category is personnel, 64.7% of the total cost. The personnel cost, as a percent of the total program, tends to decrease as the size of the program, measured by the total cost, increases. On the average, almost 2/3 of the personnel cost is paid to people working in the family planning program on a full-time basis. Volunteer or other agency personnel, not used for matching purposes, accounted for 6.2% of the total personnel cost.

The organizational emphasis, as measured by the internal cost structure, showed significant differences between Planned Parenthoods -- typical of the single-purpose program -- and Health Departments -- typical of the multi-purpose agency. This

is shown in Table E-I. Another difference between the single- and multi-purpose agency's program is illustrated by the percent of the personnel cost paid to full-time personnel. Planned Parenthoods spend significantly more, 76.5%, of their personnel cost for full-time workers than Health Departments, 53.9%. It was found, however, that these differences do not affect the overall cost of providing services.

A more detailed breakdown of the direct cost of some of the more significant component activities of a family planning program is given in Table E-II. For these activities, WPC has included the cost of personnel and supplies.

The most valid approach for comparing the cost of service delivery between diverse programs is to compare their total cost of some aggregation of activities per patient served. Table E-III shows the ranges and program and patient averages for several cost measures. Retention costs include appointment reminders, logistical assistance -- including rides and baby-sitting -- and all other follow-up costs. The New Patient Costs include only services actually performed at the initial visit.

Many of these measures exhibit large variances and one might be inclined, initially, to suspect data errors. A detailed analysis, however, shows that similar programs have reasonably similar costs; thus the large ranges are probably representative of the actual differences in the cost of service provision in

Table E-I

Average Activity Area Cost as a Percent of the Total Cost by the Organizational Affiliation of the Family Planning Program

Activity Area	Overall Average	Average for Planned Parenthoods	Average for Health Departments
A. Direct Provision of Family Planning Medical Services*	42.1	36.5	45.8
B. Educational & Social Services	20.5	20.4	22.1
C. Community Involvement*	4.2	5.5	3.2
D. Management and Administration (Including all overhead & facilities costs)*	32.2	37.6	28.9

*Note: For these areas, the differences between the Planned Parenthood and Health Department averages are statistically significant.

Table E-II
Average Direct Costs as a Percent of the Total Cost for Selected Component Activities

Activity	Cost Percent
I. Service Provision	62.6
Initial Examination/Contraceptive Supply	10.6
Contraceptive Resupply	6.6
Medical Treatment & Follow-up (Including annual examination)	7.1
Laboratory Services	9.0
Nutritional & Social Counseling	2.2
II. Service Support	37.4
Data & Records (excluding medical records)	4.2
Fiscal Management	2.0
Personnel Development	2.8

Table E-III

Cost Measure Ranges and Averages
(See text for explanation of activities)

Cost Measure	Minimum	Maximum	Program Average	Patient Average
New Patient Recruitment per New Patient	$5.20	$105.30	$ 28.30	$ 26.20
Retention Cost per Continuing Patient	2.40	103.80	18.30	8.50
New Patient Costs per New Patient	23.70	146.20	61.50	54.30
Continuing Patient Costs per Continuing Patient	23.20	387.20	117.80	78.80
Total Cost per Unduplicated Patient	28.40	182.30	78.40	66.00
Annual Cost per Oral Patient	18.10	187.50	72.70	N/A
Annual Cost per IUD Patient	27.30	293.40	97.40	N/A

diverse programs. Because every measure examined showed a significant distinction between the cost of services between young programs -- starting in 1969 and 1970 -- and older ones -- starting before 1968 -- WPC judged age to be the single most significant factor affecting the programs' costs. Almost all of them are also affected by the size of the program as measured by the total cost. There are also several important negative conclusions that can be obtained from the data. Organizational affiliation is not a significant factor affecting the cost measures. Further, the method of service delivery -- free-standing facility, mobile teams or clinics, postpartum oriented programs -- does not seem to affect the cost indicators.

Table E-IV summarizes the classification scheme derived from the comparative analysis. In these terms, the group of small young, small old, and large young programs costs almost twice as much per patient as the group containing the medium young, medium old, and large old programs. The more expensive nature of the first group was no surprise: small organizations, having no economies-of-scale, could be expected to cost more, as would large young programs which don't have the organizational maturity to use a large resource base. The greatest surprises came from the conclusions that age does not affect the cost of medium size programs, and that they cost the same as large old ones.

Table E-IV

Program Classification

Variable	Strata	Range
Size	Small	Under $100,000 Total Cost
	Medium	$100,001 - $390,000 Total Cost
	Large	$390.001 and greater Total Cost
Age	Young	First provided Services in 1969 or 1970
	Old	First provided Services before 1968

The explanation for these conclusions can be found in the patient load models. For all programs, regardless of size and age, the new patient load is roughly proportional to the total cost. The continuing patient load for medium programs, regardless of age, is disproportionately larger than for small and large programs. Thus we see that the total patient load in medium programs is independent of age, and hence young and old medium programs will have approximately the same cost per patient. We also see that, because these programs have a larger number of patients than can be expected from their size, their per patient costs will be as low as the large old programs' cost.

In many structural and patient load aspects, it appears that there may not be any truly large programs. Indeed, in these cases, the large programs appear to be a composite of small and medium components. Two of the programs we analyzed were indeed obvious conglomerates of interrelated service providers, no one of which was large. However, some of the data suggests that even large single service provider grantees may function similarly.

Based on these considerations, it appears that the optimum funding strategy is to start a program in the medium range and not to significantly increase its funding until the program has matured to an old one. These conclusions do not imply that large state-wide programs should be avoided. Indeed, if they are composed of several medium size separable service providers, they should be as efficient as if each had been funded separately.

D. Summary of Contents

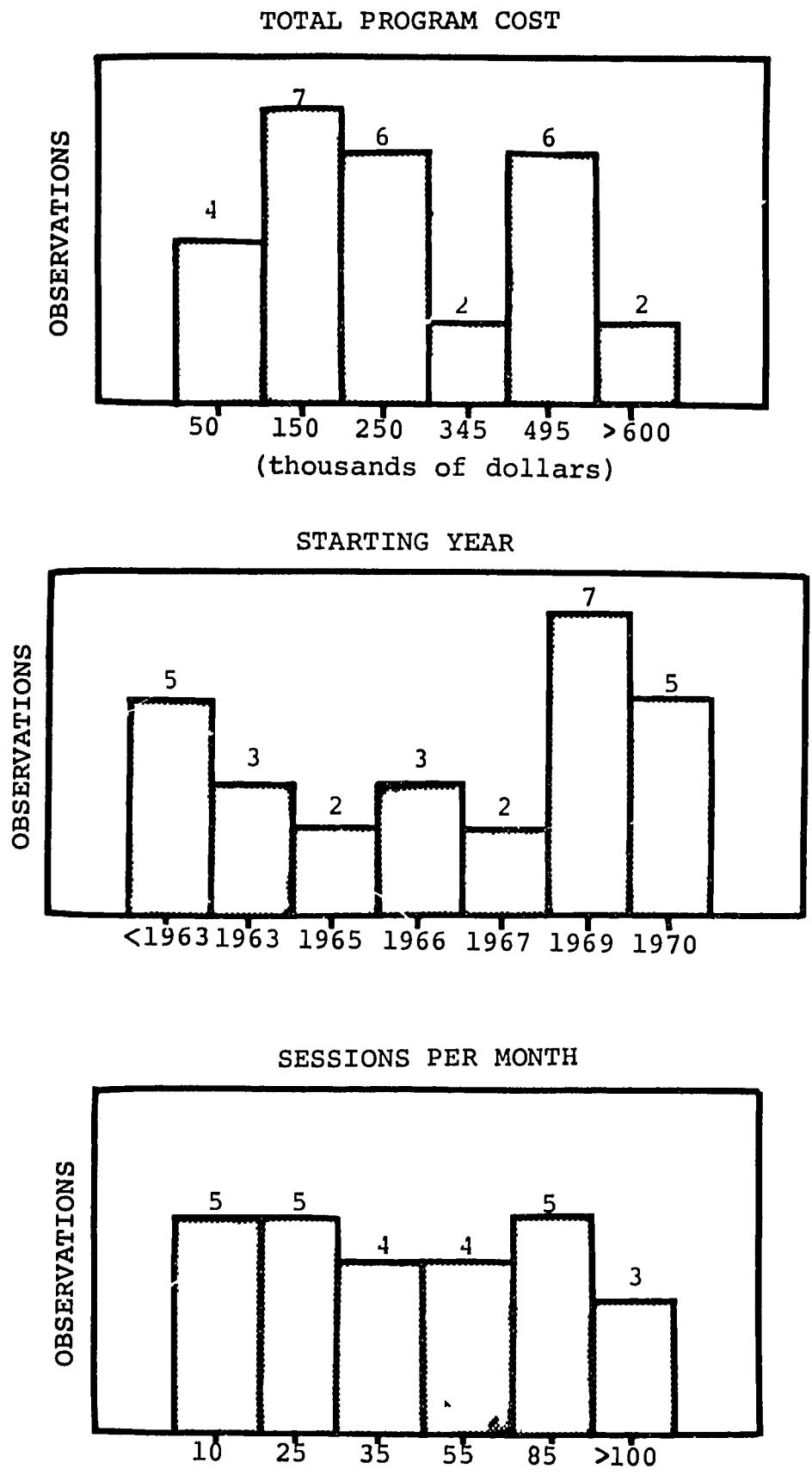
The detailed presentation of the information and data collected during each of the site visits is contained in a series of twenty-four Individual Grantee Reports which have been provided to the NCFPS separately. In addition to this report and the Individual Grantee Reports, there is a Feasibility and Cost Data Utilization Report which is also available separately.

The Comprehensive Report consists of two volumes. This volume contains a detailed presentation of the background, procedures and general findings of the cost study; the second volume contains the complete tabular presentation of all the comparative data for the twenty-four grantees.

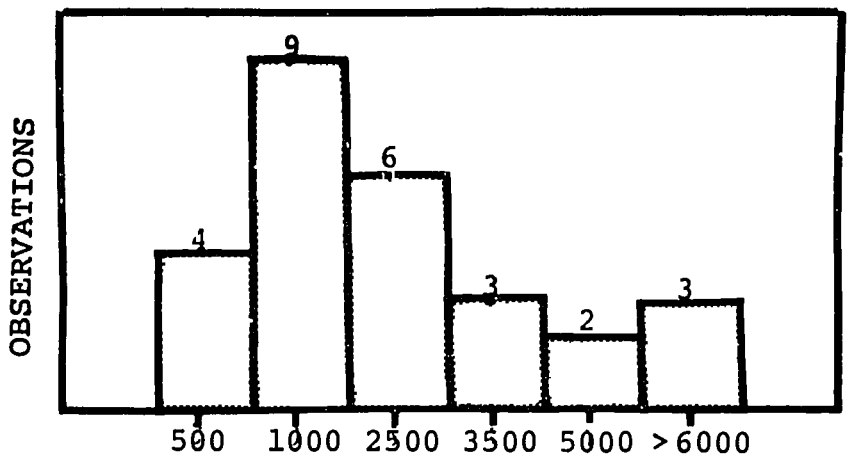
This volume is divided into six sections and an appendix. Section I deals with the background and purposes of the study, together with the general methodology employed. Section II covers the development of the analytical framework which was used as a basis for conducting the study. Section III covers the identification and categorization of the NCFPS funded family planning programs and the sample design and selection process. Section IV documents the design of the data collection instruments and illustrates the typical site visit procedures used. Section V covers the processing of the data collected from the site visits and the mathematical and computer techniques used

for data analysis. Section VI, printed on pink paper for reader convenience, includes the comparative cost data and statistical analysis of the various cost components of family planning programs. There is also a description of the procedures for analysis which can be used in conjunction with the complete tables contained in Volume 2. The appendix contains the definitions and worksheets and formulas used during the collection and analysis of the data.

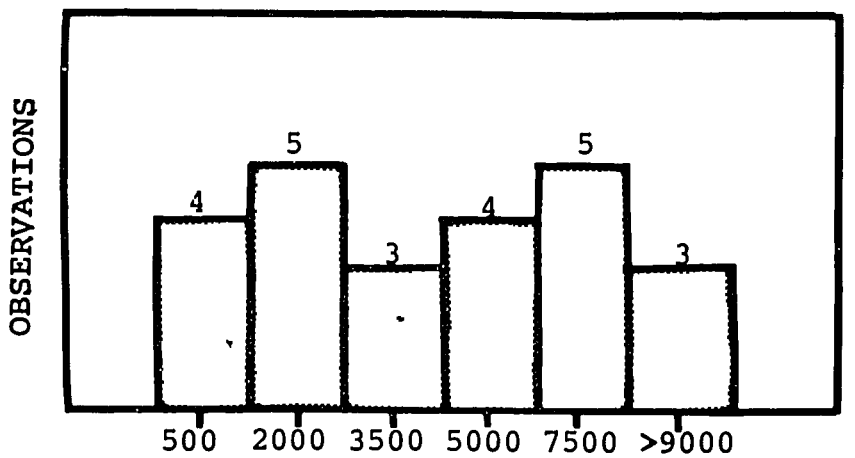
Figure E-1. Graphic Presentation of Sample Data



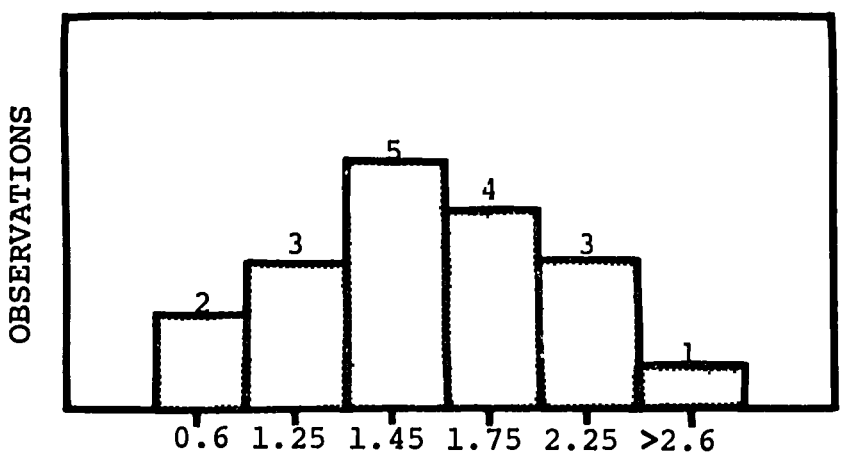
NEW PATIENTS



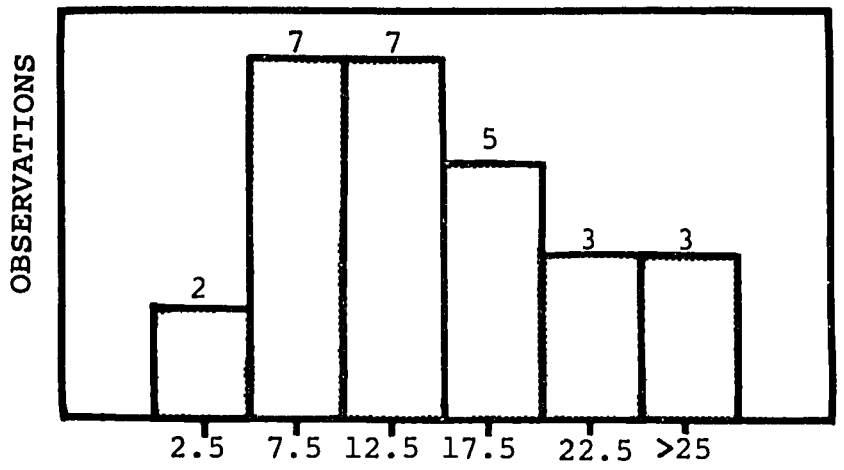
UNDUPLICATED PATIENTS



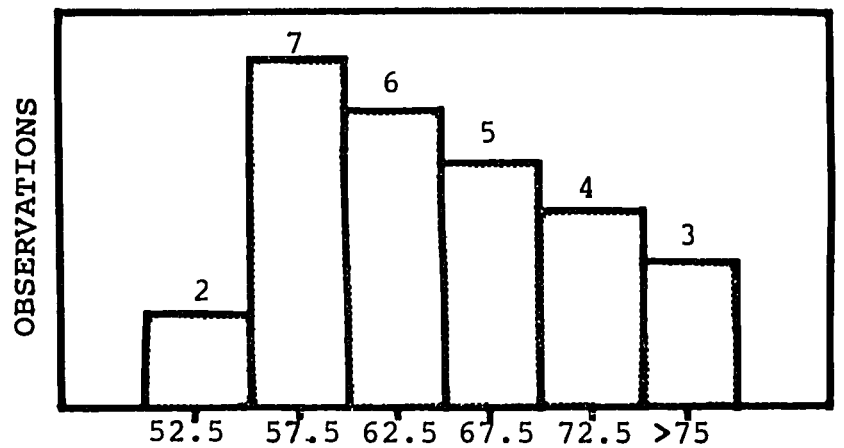
VISITS PER PATIENT



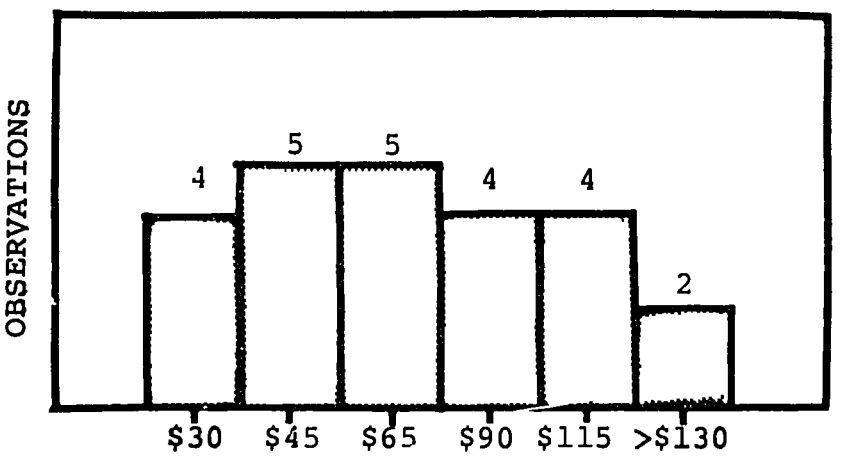
UNBUDGETED PERCENT



PERSONNEL AS PERCENT OF TOTAL COST



COST PER UNDUPLICATED PATIENT



SECTION I INTRODUCTION

A. Background

The National Center for Family Planning Services is responsible for the funding of over 200 family planning programs. The NCFPS must monitor existing programs, make decisions on the funding of new programs and the expansion of current projects, and establish basic levels of service to be provided. To do this wisely, the relationship between the cost of providing services and the characteristics of the various programs should be known. These relationships cannot be determined until comparable cost data are available for all service providers. This type of data was not available and it was not known if it was feasible to implement a continuing data collection system.

The NCFPS grantees encompass a wide range of organizational structures and affiliations. Their present accounting systems are varied. There is not only a lack of consistency in the program content and accounting methods used but also an absence of standard definitions of program inputs and outputs. A uniform cost reporting system could take into account these program variations.

The information that would be contained in a uniform cost reporting system is particularly important during the early stages of a national program providing family planning medical services. During this time, basic management decisions

about the location of service providers and the level of project funding are being made. The funding process itself, constrained by the governmental budgeting cycle, also makes accurate, timely, financial data important. Project refunding is often based on estimates which may be incorrect due to unexpected changes. Also, inadequate time or information frequently prevents reconciliation of actual operating experience with original estimates.

At the National Center level program planners must know the average and aggregate costs of delivering family planning services. This facilitates accurate estimates of the number and types of women who can be served with Federal funds. Each operating service provider or grantee should know how its operations compare with similar ones. When one particular cost indicator differs significantly from those of similar projects the reasons for the difference can be ascertained and, if appropriate, the situation remedied. This information also can assist operating personnel with their program planning, implementation and evaluation. It can relate various activity costs to results or output, in terms of patient numbers served or services performed.

NCFPS contracted with the Westinghouse Population Center to undertake a statistically representative sample study of its grantees. This study explored the feasibility of a standardized financial recording and reporting system installed

and operated by NCFPS-funded family planning programs. WPC

1) collected basic cost-performance data by examining grantees' existing records and procedures;
2) assessed the capability of the grantees to implement and utilize a standard cost recording and reporting system; and
3) developed recommendations for cost reporting system uses by program administrators and managers.

These three study elements can be separated conceptually, but are highly interrelated. Recognizing these interrelationships, the design and implementation of the study was undertaken as a single task. However, for reporting purposes the feasibility and usage elements are presented separately. The balance of this report concerns cost/performance data collected by WPC site visit teams from the existing grantee records and procedures, and WPC's analysis of these data.

It was known at the outset that the NCFPS-funded programs had a wide range of organizational structures, operational styles and financial recording and reporting methods. A distinction was also necessary between "grantee" and "service provider." Grantees were frequently administrative units such as State Health Departments or University Foundations.

The real focus of the study was on the operating programs or service providers. Enough common features among programs did, however, permit the selection of a statistically valid sample. The study was designed to effectively handle both common program features and differences.

B. General Methodology

Field testing hypotheses, as a study methodology, were rejected because a body of knowledge on which to base the development of these hypotheses did not exist; the whole area of financial recording and reporting of information on family planning activities was too new. Also the information available on cost relationships usually was at the gross level, normally providing little more than total expenditures and patient counts. Therefore, because this study was concerned with determining the "state of the art" of financial recording and reporting systems and the feasibility of improvements, an empirical approach was used.

This was based on a comprehensive descriptive model including each possible family planning program function or activity and their direct costs. A flexible analytical framework allowed modifications to be made as actual field experience was gained. Also, WPC could interpret, adapt or adjust information from grantee records to fit the model. This was possible because staff personnel collected the data and information rather than relying on mail questionnaires.

Once the model had been constructed, the program's support or overhead costs were considered. WPC developed a methodology to distribute these costs over all the activities they supported. These costs include space, non-medical supplies and equipment, and general administration and management.

The functional activity distribution model served as the basis for the collection of the cost data. These activity-cost data were then related to the various program characteristics. Thus on the basis of the representative sample, averages and ranges of family planning activity costs for different types of family planning programs were arrived at, and are presented in Section VI.

SECTION II DEVELOPING THE ANALYTICAL FRAMEWORK

Designing the descriptive or overall model was the first step. The components of this model were then analyzed and defined in greater detail. A common terminology had to be developed that was compatible with the NCHS definition and HEW's 5 Year Plan. This common terminology also ensured the necessary comparability in the data collection phase. This entire process served as the basis for developing survey instruments and the methodologies for data comparison and analysis.

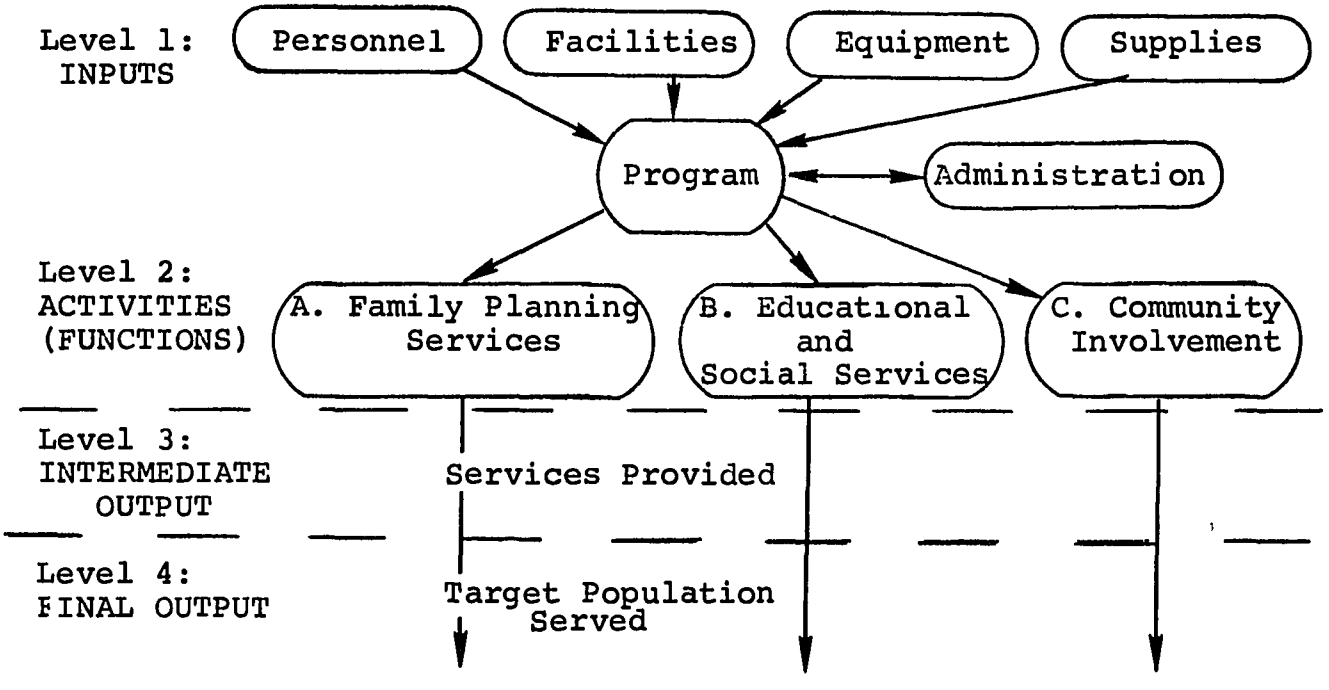
A. Elements of the Overall Model

The overall model describes the process by which resources - people, facilities, equipment, and supplies - combine

to accomplish certain functions. This process produces a measurable output or effect on a selected population. This is depicted in Figure 1. Level 1 shows the basic resources or inputs considered and accounted for in object categories. The program transforms inputs into functional activity categories directed toward the selected population at Level 2. Level 3 expresses these categories in terms of numbers and costs of service provided (intermediate outputs). Measuring the impact of this functional process on the population occurs at Level 4 (final output).

This process synthesis clarifies the component parts of our overall model: 1. object categories; 2. functional categories; 3. and 4. output categories. The first three components comprised one part of a total package of information to be obtained during the field visits to the sample grantees.

FIGURE 1



B. Defining and Categorizing Outputs and Functional Activities

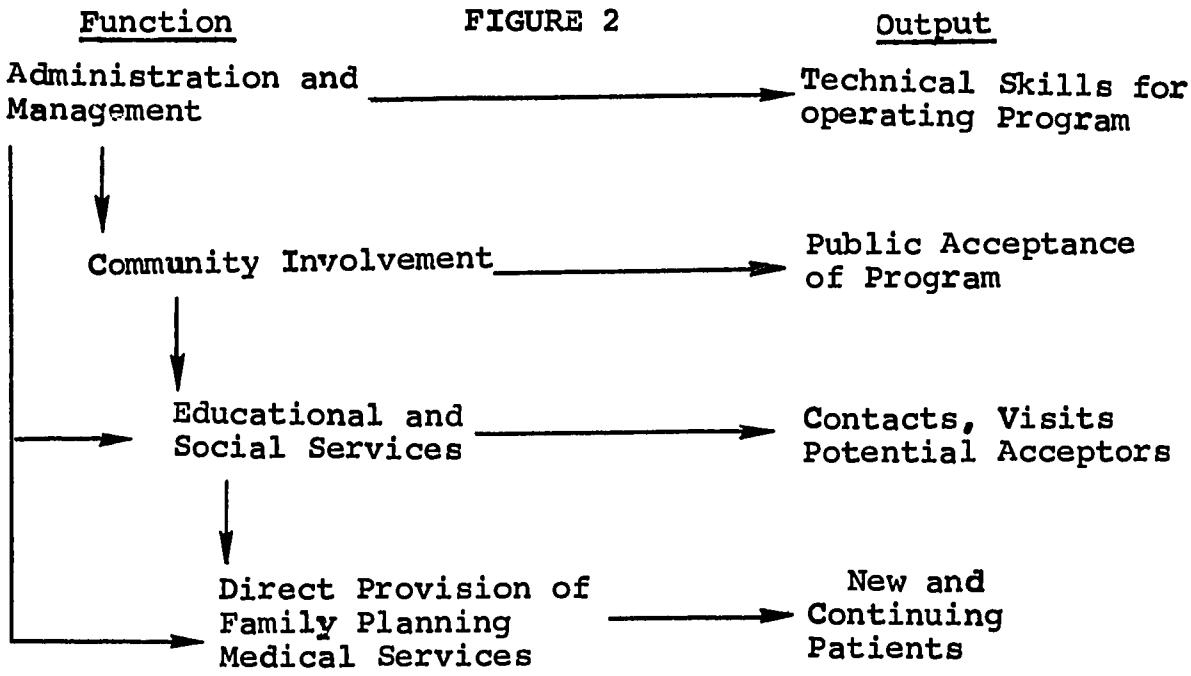
Program output, based upon the general descriptive model, may be measured in two ways. The direct, or intermediate, output measures contraceptives distributed or clinic methods performed, such as IUD's inserted, condoms distributed or pill cycles supplied. It is admitted that woman-months of contraception would have been the most meaningful output measure but due to the lack of sufficient data, this measure could not be used.

The indirect, or final, output measures the actual impact on fertility. It also measures related medical-social indicators including infant deaths, maternal mortality, illegitimacy, and dissolution of family units. This output measurement is the superior one for family planning programs. However, measuring and relating these to program inputs was beyond this project's scope.

The model contains four general functional activity areas: A.,Direct Provision of Family Planning Medical Services; B., Educational and Social Services; C., Community Involvement; and D., Management and Administration. They each generate or contribute to an output. Categories A and B have a fairly clear output because they concern themselves directly with services and/or activities for people. A., Direct Provision of Family Planning Medical Services is aimed at patients; B., Educational and Social Services is aimed at prospective patients. By their nature categories C., Community Involvement and D., Administration and Management will not produce a measurable output. Analytically speaking, C. and D. are

necessary (but not sufficient) conditions making possible the creation of outputs in Categories A. and B. However, computing the cost of performing these functions is possible by proration to Group A and B activities. Figure 2 visually suggests a conceptual scheme for these relationships.

FIGURE 2



C. Establishing Working Definitions

The absence of a common terminology is one of the most difficult aspects of collecting data from a varied sample. This is particularly true in the family planning field. Several individuals and groups have been developing a lexicon of definitions. However, WPC required certain working definitions prior to the collection of data. These definitions, developed

as an integral part of the analytical framework, were used throughout the study. (See Appendix A) Field experience proved these definitions quite satisfactory. The definitions provided a standard for grantee cost, function and output data collection. These data were adjusted when the standard definitions differed greatly from those used by the grantee or service provider.

D. Defining the Costs of the Program

The concept of "total cost", as opposed to reported cost or expenditure was basic to the study. Certain identifiable expenditures for supplies, personnel, equipment and facilities appear in the financial records of a given program. These same kinds of resources may be used by the program, but never appear as a project expenditure, because they were volunteered, donated or provided by another agency or organization. Total cost for family planning service delivery can be arrived at only by identifying and valuing each resource used regardless of its source. This provides a more accurate indicator of the true activity cost, useful in any subsequent cost/benefit or cost/effectiveness analysis. Generally the funding level provided by one granting agency is a proportion of the "total cost." The balance comes from other sources or agencies. This should be kept in mind for planning or budgeting purposes. Therefore, identifying the total cost and its component parts became one of our study's primary objectives.

The family planning program inputs consist of resources to be expended: full-and part-time, paid and volunteer, skilled and unskilled personnel services; capital and equipment use including clinics, other buildings, vehicles and medical equipment; consumable commodities, including oral contraceptives, IUD's and condoms. Almost all of these resource expenditures involve a financial transaction; consequently they are recorded in the program's book of accounts.

Traditionally, financial record-keeping ensures accountability, sees that funds are spent for their allocated purpose and prevents misappropriations. These still-important financial reporting purposes have been extended in recent years. Now financial records also lend themselves to a critical analysis of program operation. Accounts reveal whether money was spent as intended while also giving an idea of what the spending accomplished. NCFPS grantees filed quarterly the obligatory expenditure reports at the study's inception. This presented, essentially, a total expenditure figure subdivided between payments for personnel and other expenditures. They were not, however, required to use a special set of accounting classifications in their record keeping. These quarterly reports have since been discontinued.

The cost definitions and expenditure categories used by WPC in the study (See Appendix A) were designed to be compatible with the schedules of accounts predominately used in federally

supported health care delivery programs. Generally, the accounting and bookkeeping personnel of the grantees sampled were familiar with these definitions and categories.

Identifying the types and relationships of program costs within a standard time frame was necessary, since the study was for a selected twelve-month period. The time-oriented cost data included all costs, and only those costs, relating to services performed during the study period. Therefore, costs as reported in the accounting records were adjusted as follows:

1) Salaries paid during the study period but applicable to other periods were eliminated.

2) Capital costs for equipment were eliminated. Standardized values were substituted for the use of all equipment contributing to the program during the study period. (See schedule of values in Appendix A.)

3) Other capital costs such as purchase of real estate and mortgage payments were eliminated. Space costs, on both owned and donated facilities, were valued using one of two methods. The first method involved the use of the actual rental rate. The second (applicable to owned and donated facilities) involved the General Services Administration standard, annual rental rate for each particular city. (See Appendix A.)

4) Contraceptives and other supplies were priced at the amount used rather than the amount purchased, when this information was obtainable.

Total program cost was not necessarily the same as the total expenditures shown in the agency's financial reports. The above adjustments and the inclusion of unbudgeted costs created this diversity.

The following cost definitions and procedures were developed for analytical purposes.

Budgeted costs were obtained from the service provider's records. They include both project and in-kind matching costs. However, they were made time-oriented.

Unbudgeted costs did not appear in the service provider's records. They were time-oriented and may be donated, volunteer labor or free facility use, or they may be costs paid directly by another agency.

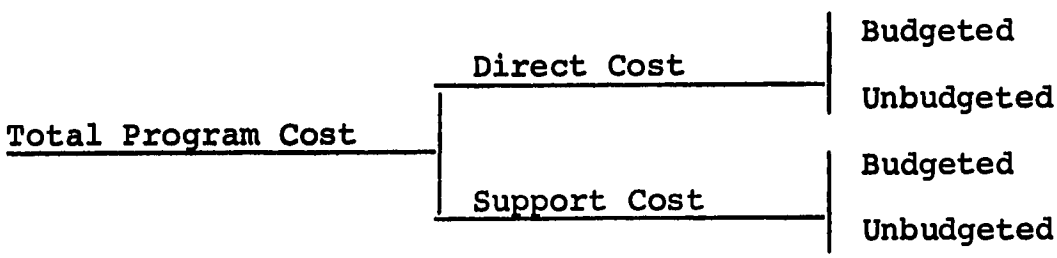
Direct cost, budgeted or unbudgeted, is attributable to the performance of a specific activity or activities. Direct costs, when available, were collected for each activity in the four activity areas. The costs in Group B, C, and D activity areas, while direct in themselves, are supportive of other activities in certain calculations. For example, Group D costs are supportive of Groups C, B and A activities. Group D and C costs are supportive of Group B and A activities and Groups D, C, and B costs are supportive of Group A activities.

Support Cost, budgeted or unbudgeted, designates the activity or activities cost calculated to support other

activities. Direct personnel costs (salaries plus fringe benefits) of an activity receiving the support costs, provide a basis for the proration of support costs. (See Appendix A)

Total program cost includes all program costs generated during the study period: direct, support, budgeted and unbudgeted.

The cost relationships are illustrated below:



E. Functional Categories for Program Activities

An activity was defined as "any identifiable function, event or occurrence which consumes program resources, e.g. personnel time, equipment, supplies or facilities."

Various activity divisions for analytical purposes were possible. An OEO study of neighborhood health centers used three major functional categories: personal health care services; supportive health care services; and general services. Another study, the OEO Family Planning Management Study used a differing division: outreach activities, medical services, and continuity assurance. The HEW document Family Planning Grants, Policies and Guidelines for Applicants expects

grantees to perform certain functions which can then provide a basis for functional performance comparisons. The WPC functional breakdown approximates the specified "elements of a project" described in this HEW document, and has the following components:

I. Service-Related

Activities providing family planning services to an individual patient or family unit, including contraceptive, medical and social services.

II. Service-Supportive

Activities establishing an environment in which service-related activities occur. These activities do not directly provide family planning services to an individual patient.

The four functional groupings below further subdivide family planning program activities.

I. SERVICE-RELATED

Group A: Direct Provision of Family Planning Medical Services includes all activities concerned with providing family planning medical services in a clinical, medical setting.

1. Registration and medical records: The initial enrollment and recording of medical histories for new patients. Registering and updating medical histories on continuing patients. Maintaining medical records and reports on all patients.

2. Initial medical examination and contraceptive supply; clinical examination of new patients, excluding laboratory work; provision of a contraceptive method, or supplies, including the necessary counseling on proper usage. Specific methods include:
   a) Oral Contraceptives
   b) Intrauterine devices
   c) Diaphragms
   d) Condoms
   e) Foams
   f) Spermicidal creams and jellies
   g) Charts for practicing rhythm
   h) Sterilization
   i) Other contraceptive methods
3. Laboratory testing: Preparing, analyzing and reporting laboratory tests performed for new as well as continuing patients.
4. Infertility treatment or referral.
5. Medical treatment or referral for patients with complications and suspected medical problems.
6. Contraceptive resupply for patients using:
   a) Oral Contraceptives
   b) Condoms
   c) Foam

d) Spermicidal creams or jellies

e) Rhythm charts

f) Other contraceptive methods.

7. Medical follow-up and reexamination of patients. using:

a) Oral contraceptives

b) I.U.D.'s

c) Diaphragms

d) Routine annual or regular physical examinations for all patients.

Group B: Educational and Social Service Activities

identify, contact and recruit potential patients and make them aware of the family planning services' availability.

1. New patient recruitment: outreach efforts including the preparation and distribution of pamphlets and materials; personal contact with potential patients.
2. Specific family planning information and consultation: information on the types of contraceptive methods and availability of services provided to specific individuals or groups before or after the provision of contraceptive services.
3. Continuation follow-up activities: telephone calls, personal visits and reminders of clinical

appointments to ensure continuous contraceptive acceptance or participation in the family planning program.

4. Logistical assistance: promotes clinic attendance by providing domestic assistance including baby-sitters and transportation to and from the clinic.
5. Non-Family Planning Consultation: on nutritional and social matters concerning patients, as well as other family related non-contraceptive consultations.

II. SERVICE-SUPPORTIVE

Group C: Community Involvement Activities elicit individual and group support for family planning objectives in the general context of community social action activities. They do not specifically identify or recruit individual patients.

1. Community Support: developing and implementing public relations programs which combine the mass media, promotional events and speakers with information distribution to create understanding and acceptance of family planning concepts.
2. Recruiting volunteer or paid family planning workers from the local community.

3. Community and consumer participation in family planning development and evaluation services: includes working with consumer or community advisor boards or groups and providing training to those groups.
4. Organizational coordination with other community service groups providing health or family planning services: includes working with coordinating councils and contacting other community agencies or service organizations.

Group D: Management and Administration Activities

includes logistical and administrative support activities for the entire program.

1. Data record preparation for program analysis and statistical reporting; includes use of the National Center for Health Statistics reporting forms, excludes individual patient medical history and record forms.
2. Personnel development and training activities which improve job skills and performance of program employees: includes planning and conducting of in-service and off site training programs, and attendance at conferences and workshops.
3. Planning and evaluating program objectives: based on the National Center for Health

Statistics patient reporting system, financial records and other program data. Uses formal and informal efforts.

4. Administrative coordination with other service organizations concerning day-to-day operational aspects of family planning delivery systems.
5. General management and administrative activities providing direction, standardization, regularization and control for all other project functions: includes a) personnel management; b) supply management; c) fiscal management; d) facilities management; e) equipment management; and f) general supervision.

Figure 3 illustrates these activity relationships.

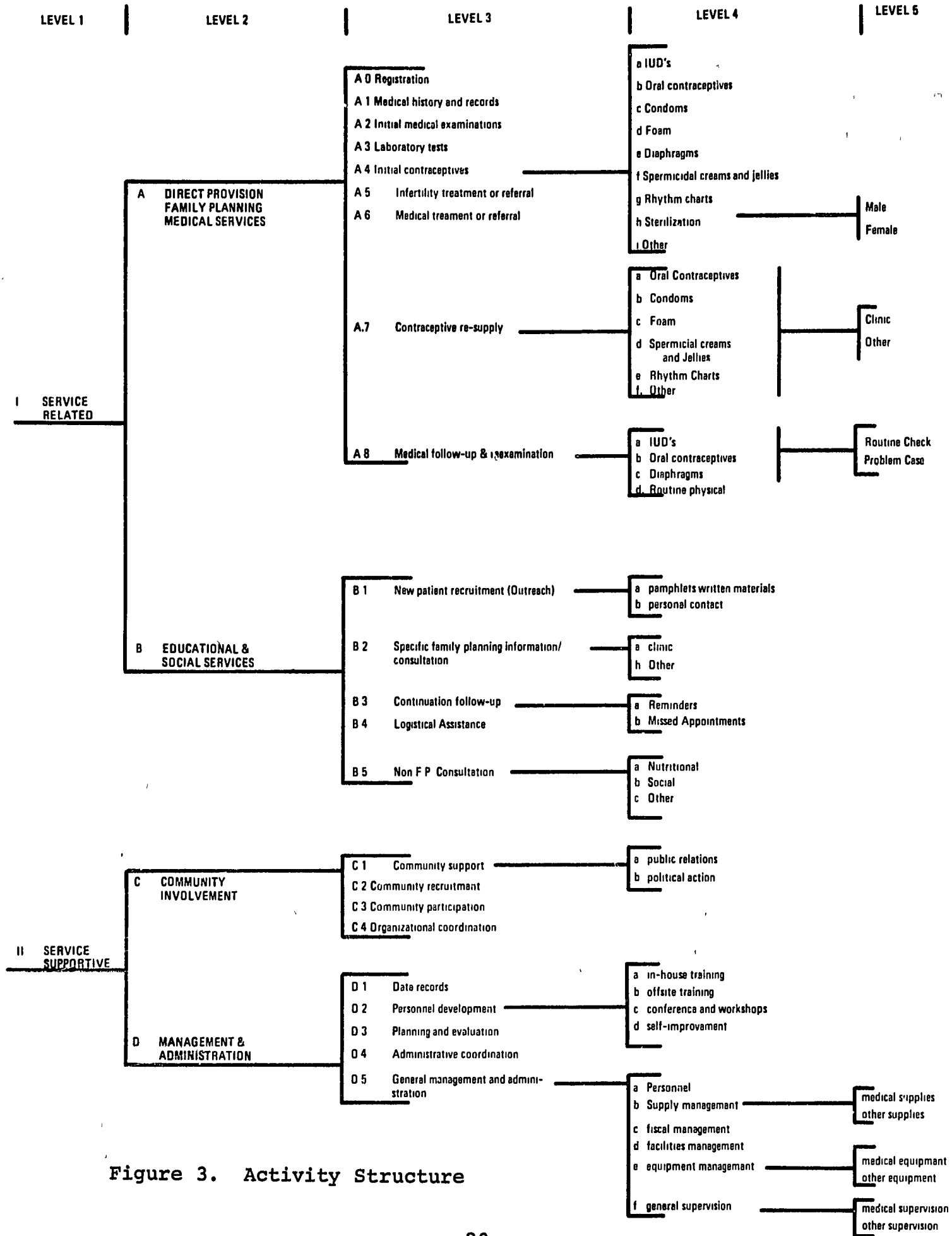


Figure 3. Activity Structure

SECTION III CHARACTERIZATION OF GRANTEES AND SAMPLE SELECTION

Selecting a statistically representative sample of the NCFPS grantees was the principal objective of this phase of the study. Before a sample framework could be developed for the categorization of grantees, some common characteristics had to be identified.

Program characteristics were determined from information available at the NCFPS Rockville, Maryland offices. WPC used abstracts compiled for NCFPS which presented comparable background information on the individual grantees. At that time abstracts were available for 125 of the approximate 180 grantees. The sample frame was developed from these available abstracts.

A. Determining the Survey and Sample Design

A survey can be either a "census" or a population sample conducted through field visits or self-enumeration questions. The "census" approach was too expensive and time consuming for this large population. Self-enumeration works best when the respondents uniformly answer all questions. But the mail questionnaire breaks down when feedback between the respondent and the surveyors is required. In 1970 NCFPS conducted an informal limited cost study of this type. They noted the problems created by basic concept ambiguties, different time periods, and unmanageable variation in survey responses.

The sampling technique adopted by WPC involves defining a "population" of like events or elements; elements are then selected in an unbiased manner within ascertainable confidence limits and

represent the whole population. Because the NCFPS grantee population varies significantly in organizational and operational styles, a probability sampling frame was used in this study.

B. Describing the Grantee Population

Using the grantee file abstracts, six variables were identified for each of the 125 grantees:

1. size of budget;
2. age of program;
3. location of project;
4. current patient load;
5. type of clinic;
6. regional location.

A detailed review of a number of complete grantee files and resumes indicated that information on these six variables was generally available. Incomplete information on other variables, such as clinic sites or clinic sessions, restricted their sample selection utility.

The budget figures used covered the last inclusive twelve-month grant period. Grant periods greater than twelve months necessitated "annualization" by proration. Budget figures used were the HEW grant plus matching state and local funds. They exclude other federal, state or local funding. Age of project also was tabulated. The project pre-dated 1969 for 89 grantees and began in 1969 or later for the other 36 grantees.

Location of project was divided into two strata. Seventy-five metropolitan cases emphasized central city areas in which the primary facility was located. Fifty non-metropolitan cases emphasized suburban and rural areas. Current patient load was only available for 91 cases. The distribution showed a central tendency in the 1000-3999 range. The type of clinic also was tabulated for the 125 grantees. This classification identifies the functional orientation of the grantee's service provider(s). Strata construction differentiates between single purpose agencies, multi-purpose health service agencies, hospital-affiliated agencies, and grantees using mobile clinics and/or teams. Location of projects by federal region also was tabluated.

The distribution of the universe, relative to each of the six variables, follows. These distributions were reasonably normal.

TABLE I

SIZE OF BUDGET

BUDGET RANGE from	to	FREQUENCY	BUDGET RANGE from	to	FREQUENCY
$ 0-	20000	0	$300000-	320000	2
20000-	40000	6	320000-	340000	3
40000-	60000	5	340000-	360000	3
60000-	80000	10	360000-	380000	0
80000-	100000	8	380000-	400000	0
100000-	120000	12	400000-	420000	3
120000-	140000	10	420000-	440000	1
140000-	160000	2	440000-	460000	2
160000-	180000	7	460000-	480000	2
180000-	200000	9	480000-	500000	3
200000-	220000	7	500000-	520000	1
220000-	240000	3	520000-	540000	2
240000-	260000	2	540000-	560000	0
260000-	280000	6	560000-	580000	0
280000-	300000	2	580000-	600000	1
			Over	600000	13

TABLE II

AGE OF PROGRAM

(Services first provided)

STARTING DATE	FREQUENCY	STARTING DATE	FREQUENCY
1924	1	1960	1
		1961	2
1930	1	1962	1
1931	1	1963	1
1934	1	1964	6
1935	3	1965	15
		1966	12
1940	1	1967	15
1945	1	1968	24
		1969	24
1953	1		
1954	1	1970	12
1958	1		
		TOTAL	125

TABLE III

LOCATION OF PROJECT

		FREQUENCY
Metropolitan:	Main emphasis in central city area with majority of facilities located there.	75
Non-Metropolitan:	Main emphasis not in central city including suburban and rural.	50
	TOTAL	125

TABLE IV

CURRENT PATIENT LOAD

CURRENT PATIENTS	FREQUENCY
less than 100	3
100 - 199	2
200 - 299	4
300 - 399	4
400 - 499	2
500 - 599	3
600 - 699	5
700 - 799	3
800 - 899	2
900 - 999	2
1,000 - 1,999	17
2,000 - 2,999	8
3,000 - 3,999	8
4,000 - 4,999	5
5,000 - 5,999	4
6,000 - 6,999	1
7,000 - 7,999	6
8,000 - 8,999	0
9,000 - 9,999	1
10,000 -10,999	2
11,000 -11,999	0
12,000 -12,999	2
13,000 -13,999	1
14,000 -14,999	0
15,000 -15,999	1
16,000 -16,999	0
17,000 -17,999	0
18,000 -18,999	1
19,000 -19,999	0
20,000 -and over	4
	91

TABLE V TYPE OF CLINIC

	Frequency
(a) Single Purpose (primarily an agency such as Planned Parenthood, family guidance centers, etc., where family planning is the main, if not the sole, job)	17
(b) Multi-Purpose (agencies such as a state or local health department, volunteer community health action groups, etc.)	59
(c) Hospital-Based (where the major base is a hospital, university clinic, medical school, or the like)	36
(d) Mobile (where vans, or traveling teams and sporadic locations are the main approach)	9
(e) Not Identifiable	4
TOTAL	125

TABLE VI REGIONAL LOCATIONS

REGION	FREQUENCY
I	8
II	10
III	10
IV	24
V	18
VI	18
VII	9
VIII	3
IX	22
X	3
	125

C. The Sample Framework

The NCFPS had specified that the final cost models be representative of at least these three variables: location, age, and size of project. The selection of these three variables had been based on their informal cost study and the OEO study. To insure that the models would be compatible with these variables, WPC designed the survey around them. The review of the grantee files and abstracts verified that this information was available for all grantees.

A representative random sample was constructed for the population stratified by budget size, age, and location. The population of 125 was divided into three categories or strata by annualized budget: "Small" - below $140,000 (5 cases); "Medium" -$140,001 to $399,999 (46 cases); and "Large" - $400,000 and over (28 cases). Each of these strata contained two further sub-strata: "Old" (projects whose operations preceded 1969); and "Young" (projects beginning in 1969 or later). This division assumed that a program "matures" after two years of operation. This yielded a three-by-two matrix. Finally each of these six cells was divided into two further sub-strata: "Metropolitan" (programs whose main location, emphasis, and affiliation were in the central part of a metropolitan area); and "Non-Metropolitan" (rural, small urban or suburban programs).

The stratification produced the three-by-two-by-two breakdown (a total of 12 cells), illustrated in Table VII. The distribution was relatively uniform.

TABLE VII GRANTEE POPULATION AND SAMPLE

CASES BY 12 SUBSTRATA

Categories	Population	Sample
S,O,M	14	3
S,O,NM	17	3
S,Y,M	11	2
S,Y,NM	9	2
M,O,M	24	5
M,O,NM	8	2
M,Y,M	3	1
M,Y,NM	11	2
L,O,M	20	3
L,O,NM	4	1
L,Y,M	3	1
L,Y,NM	1	0
	125	25

Where:
S=Small budget (under $140,000)
M=Medium budget ($140,000 - 399,999)
L=Large budget ($400,000 and over)
O=Old project (operating pre-1969)
Y-Young project (operating 1969 or later)
M=Metrololitan (located in central city)
NM=Non-metropolitan (located outside central city)

The size of the sample selected from each sub-stratum was one-fifth of the cell population. One-fifth is the ratio of the total sample size to the whole population. When a stratum contained a number not evenly divisible by five, the quotient was rounded to the nearest integer and sampled on that basis. Although the sample basis was only a three-variable stratification, it also proved to be representative of the population relative to the other three variables examined. The grantees chosen are listed in Table VIII.

TABLE VIII

GEOGRAPHICAL LOCATION, STRATIFICATION AND GRANT NUMBER OF SAMPLES

LYM-Large-Young-Metropolitan
Columbus, Ohio

MYM-Medium-Young-Metropolitan
Toledo, Ohio

SYM-Small-Young-Metropolitan
Gainesville, Ga.
East Orange, N.J.

LOM-Large-Old-Metropolitan
Newark, N.J.
Fort Worth, Texas
Seattle, Wash.

MOM-Medium-Old-Metropolitan
Dayton, Ohio
Hartford, Conn.
Tucson, Ariz.
Syracuse, N.Y.
Kansas City, Mo.

SOM-Small-Old-Metropolitan
Savannah, Ga.
San Jose, Calif.
Boise, Idaho

MONM-Medium-Old-Non-Metropolitan
Wilmington, Del.
Augusta, Ga.

SYNM-Small-Young-Non-Metropolitan
W. Palm Beach, Fla.
El Centro, Calif.

LONM-Large-Old-Non-Metropolitan
Indianapolis, Ind.

SONM-Small-Old-Non-Metropolitan
Ventura, Calif.
Flint, Mich.
Eagle Pass, Tex.

MYNM-Medium-Young-Non-Metropolitan
Tulsa, Okla.
San Bernardino, Calif.

D. Survey Sampling Methodology

The grantee file abstracts were sorted by budget, age and location. These abstracts, one summary page per grantee, were sorted and handled by a number of staff members, which resulted in a random ordering. However, to ensure an unbiased sample a two-stage selection procedure was constructed, based on a table of random digits. The two-stage process augments the single-stage randomization of the grantees within each cell yielding triple randomization, and eliminating unwanted bias in sample selection.

One column in the following random number table was used in each sample cell.

Ninety-sixth Thousand

	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40
1	71 84	75 11	67 59	58 68	58 82	31 86	05 72	67 80	07 17	27 77
2	53 03	17 77	77 20	33 26	17 76	34 97	27 38	98 29	48 87	94 10
3	46 94	37 49	80 90	79 67	68 11	05 05	46 48	80 41	97 57	61 85
4	84 19	12 26	67 68	28 64	3. 48	32 54	83 89	59 06	26 64	48 31
5	71 48	58 93	09 06	11 80	17 38	48 55	84 43	19 15	72 49	29 35
6	89 50	27 14	20 08	84 94	10 97	46 38	63 23	86 62	43 32	15 52
7	79 31	14 76	36 38	41 19	19 30	.5 46	46 86	50 07	10 26	66 96
8	50 50	49 02	77 68	59 39	25 70	5/ 03	60 62	67 20	55 65	87 94
9	24 56	90 38	34 84	87 09	25 90	40 33	84 77	06 57	78 75	06 00
10	21 16	52 91	93 82	81 36	45 27	79 55	42 23	61 78	70 26	04 20
11	01 93	80 67	91 22	77 35	12 45	28 06	03 33	82 67	15 04	42 44
12	38 38	27 05	94 29	39 24	92 73	12 94	97 10	15 80	40 41	05 20
13	90 87	61 03	96 35	90 27	11 97	36 79	91 98	40 46	18 03	71 59
14	48 49	85 86	63 34	08 92	37 83	86 68	08 96	38 08	26 83	78 69
15	45 03	39 55	51 37	89 28	46 68	47 22	07 01	50 00	05 36	78 13
16	14 71	66 70	37 56	61 38	55 05	23 47	94 51	85 65	92 49	87 31
17	02 10	51 75	02 42	44 84	51 18	18 07	19 96	95 51	62 77	18 73
18	38 93	08 89	78 98	77 29	55 49	55 55	22 51	42 53	26 64	83 23
19	17 56	97 82	02 37	27 53	67 99	92 67	34 63	88 67	84 75	22 70
20	30 95	82 49	04 20	08 91	11 46	62 60	96 57	24 75	41 58	43 25
21	96 16	76 52	88 95	49 13	21 82	85 84	19 01	03 64	74 91	50 92
22	01 22	04 38	45 59	91 92	53 20	86 75	18 12	30 15	44 28	22 73
23	44 11	38 22	82 31	01 46	05 89	36 44	14 07	25 80	80 04	06 77
24	26 87	15 33	90 55	71 13	93 31	07 30	21 59	71 41	77 03	47 04
25	49 10	33 76	70 24	35 33	19 69	41 17	60 48	78 72	21 23	44 24

(*Source* Kendall, M G, and Babington Smith, *Tables of Random Sampling Numbers*, Tracts for Computers No 27, Cambridge University Press, 1954)

The first number in the column was divided by four to provide a random starting point in the column. This starting point was then used to select samples from each cell. Consider the first column in the table as an example and assume that we are selecting two samples from a population of seven. The first number in the first column is 71, which when divided by 4, yields a starting number of 17. The seventeenth and eighteenth numbers in the column are 02 and 38. The numbers between 00 and 99, when selecting from a cell of seven, are divided into seven approximately equal ranges as follows:

Position	Range
1	00-14
2	15-29
3	30-44
4	45-59
5	60-74
6	75-86
7	87-99

Thus the numbers 02 and 38 provide a random selection of the first and third elements of the cell.

SECTION IV DATA COLLECTION INSTRUMENTS AND SITE VISIT PROCEDURES

The survey instruments were designed based upon the cost and activity models. An integrated coding system was used which related various costs to specific activities. Since the data were to be collected by WPC personnel, a worksheet format was used with detailed instructions for completion. A pre-test of the forms was made with the Baltimore City Health Department (See Appendix A for sample forms and instructions).

After WPC selected the 25 grantees, the NCFPS notified each of the Regional Family Planning Directors of the purposes of the study. The Directors were told that WPC would contact them regarding the site visits to the grantees in their regions.

A. Site Visit Scheduling

A site visit schedule was developed which combined sample grantees according to geographical region; this reduced travel time and costs. Orginally site visits were scheduled from October 25, 1971, to January 19, 1972. However, as contacts were made with the grantees to arrange for the site visits, two factors necessitated modifying this initial schedule. First,site visit and grantee work schedules had to correspond. Secondly, and more significantly,some grantees had a more complex or extensive service provider

relationship than originally anticipated. This required more time for multiple service provider grantees, since each service provider required as much time and effort as a single service provider-grantee. Initially the average site visit duration per grantee had been estimated at three to four man days. This was in fact multiplied by the number of service providers per grantee. These increased time requirements necessitated eleven, not the originally planned six site visit trips. The site visits were completed on February 22, 1972.

Trip 1 - Connecticut, New York

Trip 2 - New Jersey

Trip 3 - Ohio

Trip 4 - New Jersey

Trip 5 - Michigan, Ohio

Trip 6 - Indiana

Trip 7 - Georgia

Trip 8 - Florida

Trip 9 - Oklahoma, Texas, Arizona, California, Missouri

Trip 10- Idaho, Washington

Trip 11- Delaware

Because of difficulties in scheduling and grantee work-loads it was impossible to arrange a visit to a LYM (Large-Young-Metropolitan) grantee within the time frame of the study.

B. Previsit Presentation

In advance of the visits, WPC telephoned the Regional Family Planning Directors to explain the study in detail and identify grantee personnel to be contacted. The Regional Directors then contacted the grantees in their region, informed them of the study and solicited their cooperation. WPC then phoned the grantees and explained the study and site visit procedures in greater detail. Additional information about grantee organization and operations was also obtained and recorded, on a site visit control form.

The grantees were uniformly receptive to the study's purposes and objectives. They candidly informed WPC about problems which could affect the data collection. The grantees candor and cooperative spirit prior to the site visits eased the site team work load. WPC team composition and estimated visit times were based on all of this information.

After the first telephone contact, WPC sent the grantees a study summary. It described the functional activity areas and the standard definitions used in the data collection process.

Approximately one week after the summaries had been sent, WPC again called the grantees and answered grantee questions concerning the project summary and selected appropriate site visit times. Also relevant project personnel were identified and appointments scheduled.

C. Selecting a Study Period

WPC had decided to use program records available during the latest, complete accounting year either fiscal or calendar. In two cases, however, insufficient information restricted the use of a yearly study period. Prior to April 1, 1971, the Syracuse, New York, program had been operating at a reduced level. Therefore, records, especially of program performance, from that time period were not available. Consequently, a six-month study period was used and the figures were projected on a straight line for a year. The Savannah, Georgia, records were incomplete prior to July 19, 1971. So one fiscal quarter was used and the information was projected on a straight line basis for a full year. Every other case used a twelve-month study period.

A twelve-month period was selected to eliminate seasonal program variations and ensure comparability of data between grantees. The exact twelve-month period studied was based on the availability of cost and performance data and the familiarity of the current project personnel with program operations and personnel functions during the study period.

D. Site Visit Protocol

Although the personnel and time requirements varied between grantees, a site visit typically consisted of the

following:

The site visit teams, which ranged from one to five members, held a preliminary meeting with the Project Director or Coordinator and key project staff members, and described the study in detail. This description enabled the grantees to help assess which study period would provide the most complete and accurate information. The quality and availability of records pertaining to particular study periods were discussed. WPC then described the format, purposes, and interrelationships of data collection. Appointments were scheduled, information and data, gathered.

Worksheet #1, Grantee Profile, was completed during the initial meeting. WPC solicited and filled in the information on clinic sites, clinic sessions, and funding history.

Worksheet #2, Personnel Summary, was completed primarily from project personnel records. However, key staff members were asked to recall anyone else utilized during the project's study period. Identifying unbudgeted personnel, including volunteers and/or other agency personnel, not appearing in the records was crucial. Next, job categorization was necessary. WPC's job categories, in the Personnel Summary, were adequate for all grantees. However, job categorization did not necessarily relate to activity performance. The time-distribution worksheets included and emphasized this diversity.

Two problems emerged as the Personnel Summary Worksheets were completed. The smaller programs used "clerk" as a generic title. This obscured the differences between appointment clerks (code 009), intake clerks (code 019), and clerk/typists (code 031). Consequently the clerks' primary function determined their classification.

Also many physicians (code 002) served as program administrators and managers (code 028). Usually they did some clinical work too. The physician category (code 002) was assigned to personnel with predominantly clinic responsibility.

Worksheet #7, Time Distribution, quantified personnel functions. Operating level supervisors were interviewed after the personnel summaries had been completed. The interviewers asked each supervisor to estimate time distributions for his personnel. The following structured interviewing technique facilitated these time distributions.

The supervisors received the Family Planning Program Activity Distribution Chart. (See Fig 3) WPC personnel then explained the four major functional groups with a detailed description of activities within each group.

A question and answer session followed. WPC asked, "How did the personnel we are considering spend their time during a 'typical' study period week?" An exclusion

approach was used for many personnel types, e.g., "Did the clinical nurses do any management and administration? If not, did they perform any community involvement functions?"

More detail was solicited after broad categories of personnel involvement had been identified. All personnel in a job category performing essentially the same activities were grouped on a single Time Distribution Worksheet. Unique or varied individual functions, in the same job category, were recorded on separate Time Distribution Worksheets. Responses were formulated as percentages of time or number of hours personnel worked during the "typical week."

Worksheet #3, Cost Summary concurrently was completed by another site visit team member. He inspected the project's fiscal records to identify and extract the appropriate cost data. Multiple funding complicated this procedure. It necessitated aggregating separate account costs into combined cost figures. This procedure supported the study's design, which examined the total cost and not just NCFPS's share. Another data adjustment limited costs to the twelve-month study period; many grantees had been funded for other time frames.

Worksheet #6, Activity Distribution, recorded output figures for the study period. The number of visits and the new, continuing, and unduplicated patient counts, derived from three entries, were primary output measurements.

By extensively questioning the service providers, WPC obtained the number of patients served, and the number of units performed, for each activity. Few service providers had recorded both measures. Therefore enumerating activities such as laboratory testing, contraceptive resupply, and medical and continuation follow-up were difficult.

Worksheet #6A, Laboratory Activity Distribution, was computed by reviewing the clinical and laboratory records and interviewing the clinical staff. Often the number of laboratory procedures performed was available while the number of patients benefiting from these tests was not recorded. Therefore a patient count estimate was based on the standard laboratory tests provided to different patient types.

Also, commercial or hospital laboratories, and non-profit organizations such as the American Cancer Society, often provided subsidized rates. These subsidized amounts were combined with actual costs to determine the total laboratory cost.

Worksheet #5, Capital Equipment, was documented through various sources. The property inventory, when available, was reviewed. The administrative equipment at grantee or service provider facilities was visually inspected when an equipment inventory was not maintained.

Non project (unbudgeted) equipment was itemized by the Project Administrator and clinical staff. This itemization

indicated equipment availability during the study period and estimated its program utilization time.

Worksheet #4, Patient Supplies, was obtained from the contraceptive supply inventory, or from purchase orders. These methods were difficult and time-consuming; the pertinent records were often incomplete, or unrelated to the study period. Therefore hospital pharmacy personnel or project personnel concerned with supplies had to be interviewed.

Another aspect of patient supply concerned contraceptive distribution. Determining the number of contraceptives distributed at the clinic sites was tried. It did not work because the clinics' contraceptive inventory records generally were less complete than those at central storage points. Many service providers used a central supply point for contraceptive distribution to the clinics. Therefore, calculations were based on the number of contraceptives leaving the central storage area.

Site visit members held a final meeting with administrative personnel after the data collection and interviews were completed. They discussed current fiscal and cost data usages, including potential application of a uniform or standard cost data reporting system.

SECTION V DATA PROCESSING

A. Editing and Verification

When the site visit material was received at the Westinghouse Population Center it was edited and verified. Primarily this corrected any data errors, insured internal consistency, and prepared data for keypunching. This was done by a series of multi-source checks: the individual worksheets were verified and their interrelationships examined. The worksheets also were edited and their headings and codings checked. Then the Cost Summary Worksheet, which the other worksheets support, was checked. Heading checks were important for the Cost Summary, the Cost Time Distribution and the Activity Distribution Worksheets which were used directly for keypunching.

The Profile Data Worksheet was inspected for completeness and accuracy, and then compared with back-up material. Most grantees provided back-up material such as financial records, annual reports, clinical rosters, and grant applications. Any questionable entries usually were verified by a telephone call-back to the grantee or service provider. The Personnel Summary Worksheet entries for budgeted personnel were compared to the data from the grantee/service provider's fiscal records.

The Contraceptive Supply Inventory Worksheet was edited and verified. Where possible cross-checks were made from the data to the grantee/service provider's records. The total cost of contraceptive supplies was verified by summing the

products of the average unit costs by method, and the corresponding units. The Capital Equipment Worksheet was used to calculate the grantee/service provider(s) total annual equipment value. The subtotals for medical and non-medical equipment were then computed by summing the 100 series (non-medical) and then the 200 series (medical) figures.

Frequently problems were encountered with the Activity Distribution Worksheet. Often the grantee/service provider records did not correspond to the desired breakdown. Therefore, to clarify questionable figures, the grantee/service provider was called. The clinic's unduplicated patient count was checked against the total figure for unduplicated patients (AAAAA+BBBBB) on the Activity Distribution Worksheet. The entries on the Laboratory Activity Distribution Worksheet were checked for total cost, total number of patients served, and total number of tests performed. The total cost was verified by summing the products of the unit cost by the type of test, and the related number of tests.

The Cost/Time Distribution Worksheets were checked for several items. First the name(s), salary, type of employment (full, part, or volunteer), number of like items, and cost codes were compared with the Personnel Summary Worksheet. Second, if the cost/time distribution was a percentage, the percentages were checked to insure a sum of 100; if the basis was in hours, the sum was checked against the number of hours per week (listed in blocks 16 and 17). This procedure was performed for each Cost/Time Distribution Worksheet.

Finally the sum of the salaries, calculated from the Cost/Time Distribution Worksheets, was checked against the sum of the salaries calculated from the Personnel Summary Worksheet. This sum then became an input into the Cost Summary Worksheet.

Last to be verified was the Cost Summary Worksheet. It was highly interrelated with the other worksheets. The entries on the Cost Summary Worksheet were verified in order of appearance. Section A includes salaries, taxes and benefits. The salary figures for budgeted and unbudgeted personnel were obtained from the Cost/Time Distribution Worksheets. Employee payroll taxes and benefits for budgeted personnel were determined from the grantee/service provider's fiscal records. These figures were entered in the appropriate boxes. The percentages of budgeted payroll taxes, and benefits to budgeted salaries were computed. These same percentages were used to compute unbudgeted, payroll taxes and benefits from the unbudgeted, salary figure.

Section B on the Cost Summary Worksheet was next. The amount paid to physicians rendering services on a contractual basis was entered in the appropriate budgeted or unbudgeted box. The figures derived from the laboratory worksheet were entered in the appropriate spaces. This item then was allocated, using a Cost/Time Distribution Worksheet. The laboratory costs were assigned to activity 04004. This procedure

facilitated placing laboratory cost directly into the "laboratory" activity, rather than the general category "Direct Provision of Family Planning/Medical Services." The remainder of Section B was checked. When possible costs were assigned to specific activities using a Cost/Time Distribution Worksheet. If this was not possible, the entry was spread on the Cost Summary Worksheet into categories A, B, C and/or D.

Section D contained all space and space related costs. Generally these costs were assigned to category D. Each was checked against the service provider/grantee back-up material.

Section E (supplies) entries were compared with financial data from the service provider/grantee. Patient supply costs were transferred from the Contraceptive Inventory Worksheet to the appropriate box(es). A Cost/Time Distribution Worksheet then was developed for this item. The contraceptive supply was divided into initial and resupply by method. The initial supply was determined by multiplying the number of contraceptives supplied to new patients, and the average unit cost of each method. The remainder of the method-specific cost was assigned to resupply. These figures then were entered on a Cost/Time Distribution Worksheet.

Entries for Section F also were checked against grantee/service provider financial records. Equipment purchase entries were entered for background purposes only, and were not computed in the total cost calculations. The annualized

equipment value was included in the following section. The equipment value entry was determined from the capital inventory sheet. A Cost/Time Distribution Worksheet accompanied this entry; it placed medical equipment into A-general and non-medical equipment into D-general. Other entries were spread using the cost distribution sheets when possible. If not possible the entries were spread into the appropriate A, B, C and/or D columns.

B. General Model Formula

The assumption concerning the operational processes of a family planning program was that intermediate program output is a function of the resource inputs:

(1) $O = f(P, Q, S)$

where: O = Output

P = Personnel

Q = Equipment

S = Supplies

and:

(2) $E = \sum(P \times C_p + Q \times C_q + S \times C_s)$

or total program expenditures "E" (costs) equals the total of physical inputs of various sorts, multiplied by their market cost "C" (or value). The data required for these computations are the outputs (expressed in standard units) and also the

object categories of expenditures. It also follows that cost-output ratios can be obtained easily.

$$(3)\quad CPU = \frac{E}{O}$$

Thus, cost per unit (per time period, per primarily defined "production unit") is equal to expenditures divided by output.

As was indicated above, costs and outputs were analyzed along functional or activity lines. Thus, costs and outputs could be broken down into costs and outputs attributable to the several functional categories or combinations of categories. Since output from categories (B), (C), and (D) are seen as indirect contributions toward patients, the primary input of which is (A), the equation (1) can stand as is. However, inputs can be expressed in terms of the four categories of functions rather than the object classification (inputs) previously used.

$$(4)\quad O = f\ (F_A, F_B, F_C, F_D)$$

in which: F_A = Spending on Function A

F_B = Spending on Function B

F_C = Spending on Function C

F_D = Spending on Function D

Similarly, cost per unit in terms of functional inputs can be computed.

$$(5a)\quad CPU_A = \frac{F_A}{O} \qquad (5b)\quad CPU_B = \frac{F_B}{O}$$

$$(5c)\quad CPU_C = \frac{F_C}{O} \qquad (5d)\quad CPU_D = \frac{F_D}{O}$$

(It is, of course, understood that: $CPU = CPU_A + CPU_B + CPU_C + CPU_D$ and $E = F_A + F_B + F_C + F_D$)

Contraceptive method-specific relationships can also be expressed in similar fashion.

(6) $O = g\ (O_C + O_{NC})$

Output is equal to clinical output (O_C = IUD insertions, diaphragms fitted, sterilizations performed) plus non-clinical output (O_{NC} = patients receiving oral pills, condoms, foam, and other such methods). Both sub-categories of output are to be expressed in terms of patients. The method-specific outputs can now be related to inputs also.

(7a) $O_C = h(F_a^c, F_b^c, F_c^c, F_d^c)$

(7b) $O_{NC} = i(F_a^{nc}, F_b^{nc}, F_c^{nc}, F_d^{nc})$

In this case, it is possible to go directly to the functional categorizations of inputs rather than going through the object categories first.

(Needless to say: $F_A = F_a^c + F_a^{nc}$

$F_B = F_b^c + F_b^{nc}$

$F_C = F_c^c + F_c^{nc}$

$F_D = F_d^c + F_d^{nc}$)

(8a) $E_c = F_a^c + F_b^c + F_c^c + F_d^c$

(8b) $E_{nc} = F_a^{nc} + F_b^{nc} + F_c^{nc} + F_d^{nc}$

(In which: $E = E_c + E_{nc}$)

Thus, costs per output unit can also be expressed in method-specific terms.

(9a) $CPU_c = \frac{E_c}{O_c}$ (9b) $CPU_{nc} = \frac{E_{nc}}{O_{nc}}$

(and: $CPU = CPU_c \times \frac{O_c}{O}) + (CPU_{nc} + \frac{O_{nc}}{O})$

Clearly also, the approach was applicable for "solving" any of the various measures of program output listed in the program activity schedule. Thus, for example, cost per new patient recruitment (or "initial outreach") was computed as follows:

(10a) $CPU_o = \frac{E_o}{O}$

where (10b) $E_o = F_a^o + F_b^o + F_c^o + F_d^o$

CPU_o = Cost per outreach unit (new patients recruited);

O = Total outreach units (new patients recruited);

F_a = Spending on Function A activities (Family Planning/ Medical Services) related to outreach activities;

F_b = Spending on Function B activities (Educational and Social Services)related to outreach activities;

F_c = Spending on Function C activities (Community Involvement) as allocated to outreach activities;

F_d = Spending on Function D activities (Management and Administration) as allocated to outreach activities.

Using this general formula the computer programs were developed. There were two levels of computer analysis; the first produced a detailed presentation for each grantee of the cost data obtained from the site visits. This took the form of a set of sixteen tables. (See Appendix A) Each of these individual grantee reports has been published as a separate document. This information was then used as the basis for the comparative data for all grantees contained in Section VI of this report.

C. Computer Programs - Individual Grantee Reports

PROCESS, the first of three computer programs, processes raw data into the data base. The last two, REPORT and TABLES, print the final output. Program comprehension depends on understanding the data base structure.

Each service provider and grantee has a data structure constructed from three, similarly formatted substructures. The three respectively are used for unbudgeted and budgeted expenditures and outputs.

The construction described below applies to all of them; differences will be explained later.

The data base was a tree structured matrix constructed from the accounting requirements and the tree structured activities. The accounting structure required the ability to record any program input (cost category) expenditures

by any activity. A tree with the service provider at the top, structured the functional activities contained in the activity distribution model. Figure 4 shows an example of an activity tree while Figure 5 shows the corresponding tree structured matrix. This example assumes the existence of six cost categories. Expenditures can enter the matrix at any level. Therefore, an activity's expenditures in a given cost category may be greater than the sum of its component activities. Figure 5 illustrates this with two circled numbers.

Matrices used for this study are constructed as above, but with different dimensions. The two expenditure matrices use 72 cost categories each. The output matrix uses persons served and number of activities performed. These three matrices have 129 activities. Two computer words code the activity name and parent activity name entries for each matrix row. The name appears as a six character alphanumeric field and the parent appears as a number referencing the row's matrix location. The ordered list of cost codes, and certain other words required for processing, are maintained separately.

A block of 23,603 words is the storage file for one service provider. Overall 39 service providers required 920,517 words or 5,523,102 bytes. The 39 files are stored using an indexed sequential access method. Magnetic tape was chosen as the storage medium because the anticipated low data base use could not justify using costly disk or drum

files. Magnetic tape cannot be used reliably as a random access storage device. Consequently, the PROCESS program must copy the non-updated files each time it updates the data base. The two expenditure matrices contain a cost code not described by the model. Its ERR designation is used on cards having punching errors in the cost code field. Similarly all three matrices have an extra level, one activity designated ERROR. Therefore, some mispunched cards still can be processed, and the money represented is not lost.

The REPORT program prints Tables XIV through XVI of the individual grantee reports and generates intermediate reports. The commonality of data in all service providers is insured when the required manual editing prepares data for the first fourteen tables. This data becomes an input to TABLES, the third program; Tables I through XIII are formatted and printed there. Data preparation for the third program is done with grantee reports as well as with those from the service providers. It is done in the same manner for both sources. The automatic summation of service provider data into a grantee report is provided by a REPORT input selection switch.

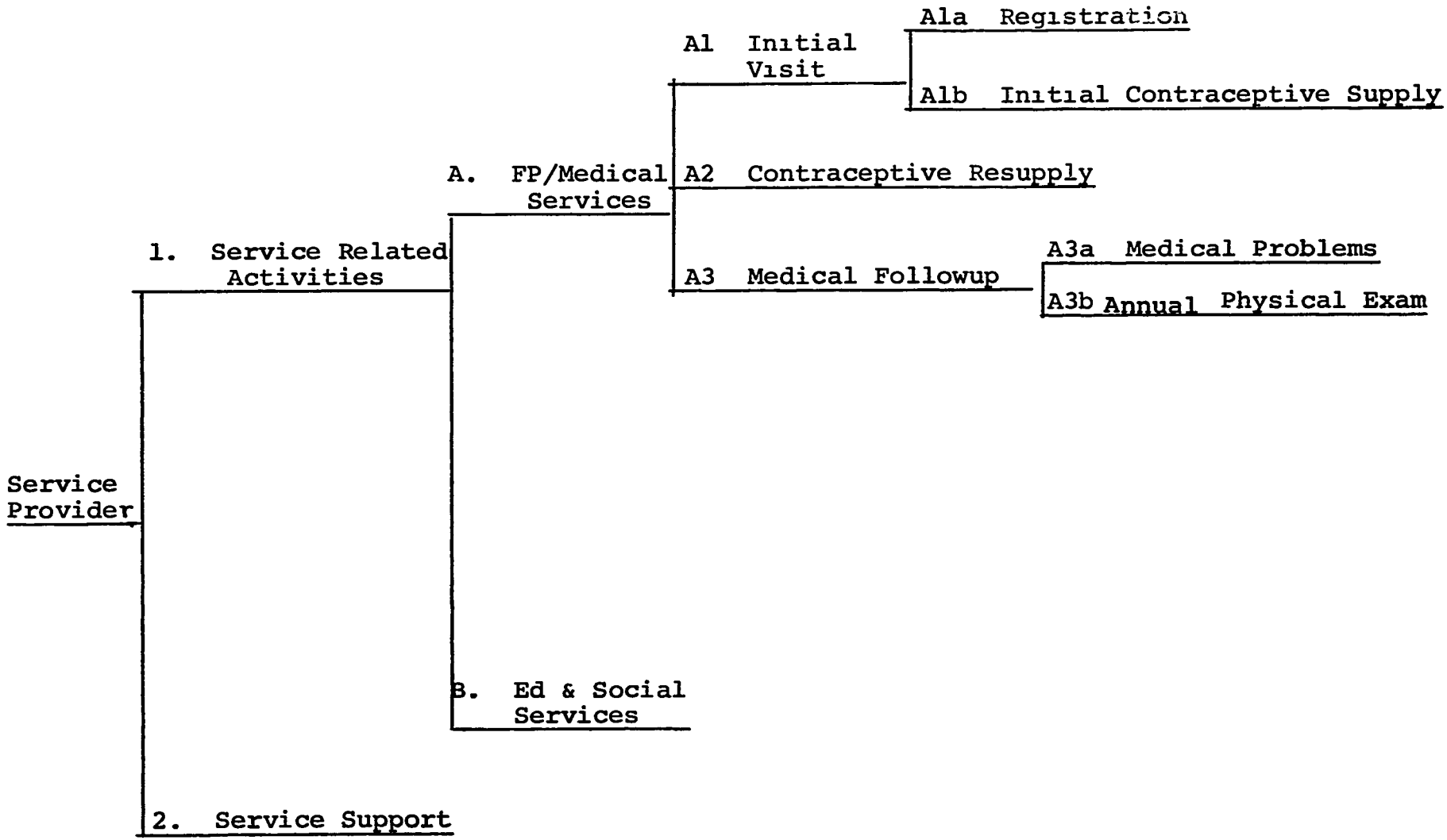


Figure 4. Activity tree structure for the data base in Figure 5.

FIGURE 5

Example of a tree structured matrix data base

Activity Name	Parent Activity	CC1	CC2	CC3	CC4	CC5	CC6
Service Prov.	0	130	10	38	27	117	65
1. Serv. Rel.	Serv. Prov.	50	10	38	27	17	55
A. FP/MED	1. Serv. Rel	34	7	17	27	17	47
A1. Initial Visits	A. FP/MED	4	6	9	15	15	18
A1a. Registration	A1. Initial Visits	2	3	4	5	6	7
A1b. Contraceptives	A1. Initial Visits	1	3	5	7	9	11
A2. Resupply	A. FP/MED	12	1	8	9	2	5
A3. Med-Follow	A. FP/MED	18	0	0	3	0	24
A3a. Problems	A3. Med-Follow	6	0	0	0	0	6
A3b. Annual Phys.	A3. Med-Follow	12	0	0	3	0	18
B. Ed & Soc.	1. Serv. Rel	16	3	21	0	0	8
2. Serv. Support	Serv. Prov.	80	0	0	0	100	10

D. Data Base Analysis

Data reduction first was performed by the computer program, PROCESS. Data analysis began with the second computer program, REPORT. In addition to Tables XIV through XVI of the grantee reports, it produced two cost reports. The Direct Cost Report summarizes the expenditures in each functional activity represented by the raw data. The total cost of each functional area, A, B, and C, are calculated using the methodology presented in Section II. The Allocated Cost Report presents these results.

Tables I through XIII are produced by the third program, TABLES. Before the input was prepared, some report editing was necessary to insure a common basis for all service providers/ grantees. Figure 6 depicts the source of the inputs. Tables I, IV-VII, and IX-XII are prepared from data transcribed from the reports and worksheet #6. Table XIII is produced automatically. The remaining three tables require hand calculations, also indicated in Figure 6.

FIGURE 6 Source of data for report tables

TABLE NUMBER	DIRECT COST REPORT	ALLOCATED COST REPORT	HAND CALCULATIONS	AUTOMATICALLY PROVIDED	OTHER SOURCES**
I	Yes				
II	Yes	Yes	Yes		#6, #6A
III		Yes	Yes		#6
IV	Yes				(#6)
V	Yes				
VI	Yes				
VII	Yes				
VIII		Yes	Yes		#6
IX	Yes				#6
X	Yes	Yes			(#6)
XI	Yes	Yes			(#6)
XII	Yes				
XIII				Yes	

**Note: The number refers to the worksheet with that number. Parentheses indicate that the data are indirectly obtained from previous input.

Table II is derived from both the Direct and Allocated Cost Reports. New patient cost equals the total of the specific new patient costs plus general costs. The latter were divided based on visit count, or patient count where visits were not available. Such general costs included registration and medical history, laboratory, and unspecified. Continuing patient costs were those directly attributable to continuing patients, plus their share of the general cost. The unduplicated patient costs were the sum of the new patient and continuing patient costs. The patient counts, if available, were entered from the activity distibution sheet.

Some data for Table III is derived from the same worksheet used for Table II. Table III is a further break-down of patient costs by visit type. If available, the figures for the number of patients served, the number of visits and the visits per patient were entered in the Distribution Worksheet. The specific program costs for the visit types were taken from the computer output. The general costs were allocated to each method, usually on the basis of relative, visit counts. Making an exact distribution of laboratory costs between new and continuing patients was possible, if the laboratory protocol for new patients and the unit cost of each test were known.

The input for Table VIII was derived from the Activity Distribution Worksheet and the Allocated Cost Report. The cost of method-specific services was computed for the costs of initial supply, resupply, and medical follow-up by type. The basic service costs consisted of the remaining program cost, excluding infertility treatment. Contracepting patient ratios allocated these costs. If the break-down of continuing patients by method could not be obtained, WPC assumed the existance of the same proportions between continuing patients as between new acceptors.

SECTION VI COMPARATIVE ANALYSIS

The activity/output structure and definitions presented in Section II represent a qualitative model of the provision of family planning/medical services. The data collected during the site visits allowed WPC to quantify this model. The twenty-four individual grantee reports represent one mode of quantification of the model. This produces, however, a collection of unrelated quantified models. NCFPS ard its Regional Family Planning staff must apply quantitative models to grantees not in the sample, and to sample grantees as their programs mature. To facilitate this, WPC performed a comparative analysis of the grantee data.

A. Unit of Analysis

This analysis is based on data for "separable service providers." For grantees with only one service provider, there is no choice in the separation. If a grantee had multiple service providers during the study period, the following separability criteria were used:

1) If one or more service providers operated independently of the rest, these were separated from the grantees.
2) If one or more service providers shared common resources or had interrelated activities, they were treated as one unit.

In the following, the term program is synonomous with separable service provider, and when no term is used, it is implied. There is a very simple rationale for this approach. Many grantees operate with several independent service providers with widely varying characteristics. For example, five grantees studied had a Planned Parenthood service provider together with one or more service providers with different organizational affiliations such as hospitals or health departments. Thus, to study the different types of service providers as completely as possible, this division was necessary.

B. Variables

Fifty-one program parameters were chosen for analysis, ranging from the order in which the grantees were visited to the total cost per unduplicated patient. These variables represent cost per unit for activities performed, organizational and operational characteristics, internal cost relationships and patient loads for the activity areas of the model. These variables were chosen as follows:

1) Structure Variables - There are two types of structure variables. The first are the setting variables describing the program's external environment. Most setting variables are highly subjective; a few, potentially most significant, were chosen. The second type of structure variables are the internal variables, describing the internal cost structure of the program. Biased data may

result from interprogram inconsistencies in the allocation of personnel time to activities representative of a very detailed breakdown. To eliminate such bias, only higher level activities were included.

2) Patient Load Variables - Patient counts were not consistently available for detailed activities in all grantees. Thus, WPC chose those patient load variables which afforded the most complete data base.

3) Cost Variables - All cost variables are expressed as the cost of some, or all, activities per unit of service. The same bias, mentioned under internal structure variables, would have resulted if detailed activities were used. Thus, WPC used cost per unit for high level activities, or combinations of these activities.

Using these criteria WPC chose those parameters, based on professional judgement, which had the highest potential for explaining variances in grantee data.

The choice of variables did not restrict the analysis. Where actual variances could not be explained with those variables chosen, WPC did not hesitate to use the rest of the available data. The variables are listed in Table IX. For convenience, the following is a summary of the relevant definitions needed to understand the meaning of the variables.

Order of Visit:

The number assigned to each program represents when the particular site(s) was visited in relation to the others in the sample. The sequence runs from 1 through 39.

Primary Service Area:

Numeric Value	Code	Definition
1	U	Urban
2	S	Suburban
3	M	Mixed (elements from 2 or more of the others)
4	R	Rural

Organizational Affiliation:

1	PP	Planned Parenthood
2	CI	City Health Department
3	CO	County Health Department
4	HT	Hospital, Teaching
5	HN	Hospital, Non-teaching
6	OT	Other

Special Characteristics

One special characteristic was assigned to each program, or was left blank in the case where there was no special characteristic.

Numeric Value	Code	Definition
0	"Blank"	None
1	PP	Postpartum
2	MC	Mobile clinic facilities
3	MT	Mobile teams
4	OT	Other

Grantee relationship:

Numeric Value	Code	Definition
1	SSP	Sole Service Provider (grantee and service provider are the same)
2	IND	Multiple Independent Service Provider (those service providers which were not interrelated with the other service provider (s))
3	INT	Multiple Interrelated Service Provider (those service provider (s) which were interrelated, e.g. shared facilities, shared staff)

Total Program Cost:

The sum of the budgeted cost and unbudgeted cost.

Budgeted Cost:

Cost which has been obtained from the records of the program. It includes both project and in-kind or matching costs.

Unbudgeted Cost:

That which does not appear in the records of the the program and is not used as matching funds.

It may be either donated, such as volunteer labor or the free use of facilities, or it may be cost paid directly by another agency.

Starting Year:

The year services were first provided by the program.

New Patient:

A person making her initial visit to the program during the study year.

Continuing Patients:

Patients who enrolled in the program prior to the start of the study year.

Unduplicated Patient Count:

The sum of new patients and continuing patients.

Total Number of Visits:

The sum of initial visits to program, revisits first this year and revisits not first this year. (These are the SDA visit categories also). Includes re-supply, complications, checkup, or annual examination revisits.

Clinic Site:

A location or place where these services are provided on a regularly scheduled basis under the direction of a physician, nurse, or nurse-midwife, including mobile clinics.

Clinic Session:

An organized session at which there is either a physician, nurse or nurse-midwife in attendance, and which has a scheduled time for service, i.e. day and hours are specified. A clinic session is usually counted in units of half days, e.g. 2 - 4 hours.

Activity Area A:

Activity Area A includes activities for the direct provision of family planning services (See Section II-E for a complete definition).

Activity Area B:

Activity Area B includes activities for education and social services (See Section II-E) .

Activity Area C :

Activity Area C includes activities for community support (See Section II-E).

Activity Area D :

Activity Area D includes activities for management and administration (See Section II-E).

Volunteer Personnel:

Volunteers may be either unpaid workers or workers paid by another agency if their salaries or salary equivalents are not used for matching. Their salaries are always treated as unbudgeted costs.

Initial Services:

Initial examination and initial contraceptive supply.

New Patient Costs:

Registration and medical history, initial examination, initial contraceptive supply, and laboratory tests. Registration, medical history and records, and unspecified costs were distributed between new and continuing patients by the ratio of first visits to total visits where available and by the ratio of other new and continuing costs where visit counts were not available. Laboratory test cost for new patients was determined by the number of tests and cost per test, with the balance applying to continuing patients. Where these data were not available, lab test cost was treated by the same method as above.

Continuing Patient Costs:

Infertility treatment, medical treatment or referral, resupply of contraceptives, medical follow-up and reexamination. Registration, medical history and records, laboratory tests, and unspecified costs were treated in the same manner as New Patient Costs.

Annual Cost of Oral Contraceptive Patients:

Costs are divided between basic and specific costs. Basic costs include the method specific proportion of those costs common to all contraceptive patients (registration, enrollment, medical history, initial examination, laboratory tests, and routine physical examinations). Specific costs are those costs directly related to the contraceptive method (initial supply/insertion, resupply, medical follow-up and reexamination).

Annual Cost of IUD Patients:

Such costs are divided between basic and specific costs as for oral patients.

Annual Cost of Diaphragm Patients:

Such costs are divided between specific and basic costs as for oral patients.

Recruiting Cost:

Consists of recruitment and information and counseling costs.

Retention Cost:

Consists of costs for continuation follow-up and logistical assistance.

For definitions of any other terms, the reader is referred to Section II.

TABLE IX VARIABLE RANGES, AVERAGES, AND VARIANCES

VARIABLE NUMBER	NUMBER OF PROGRAMS	RANGE MINUMUM	RANGE MAXIMUM	AVERAGE	VARIANCE	NAME OF VARIABLE	
1						ORDER OF VISIT	
2	27	1.0	4.0	1.7	1.1	PRIMARY SERVICE AREA	See Numeric code in the above definitions
3	27	1.0	6.0	2.8	1.6	ORGANIZATIONAL AFFILIATION	
4	10	1.0	4.0	1.8	1.2	SPECIAL CHARACTERISTICS	
5	27	1.0	3.0	1.4	.6	GRANTEE RELATIONSHIP	
6	27	60398.0	1251586.0	313986.0	264178.6	TOTAL PROGRAM COST (BUDGETED + UNBUDGETED)	
7						FEDERAL REGION	
8	27	1935.0	1970.0	1962.4	11.1	STARTING YEAR (PROGRAM AGE)	
9	27	445.0	8716.0	2723.4	2113.0	NUMBER OF NEW PATIENTS	
10	24	.0	7512.0	2180.5	1845.5	NUMBER OF CONTINUING PATIENTS	
11	24	481.0	12983.0	5005.7	3380.5	UNDUPLICATED PATIENT COUNT	
12	20	1209.0	21154.0	8039.7	5566.2	TOTAL NUMBER OF VISITS	
13	27	1.0	31.0	7.6	6.9	NUMBER OF CLINIC SITES	
14	26	.4	174.0	52.2	45.1	NUMBER OF CLINIC SESSIONS PER MONTH	
15	27	59.8	97.1	85.2	8.3	BUDGETED COST ***	
16	27	3.0	40.3	14.9	8.3	UNBUDGETED COST ***	
17	27	24.3	63.5	42.1	9.2	ACTIVITY AREA 'A' COSTS***	

***AS A PERCENT OF TOTAL COST

VARIABLE NUMBER	NUMBER OF PROGRAMS	RANGE MINIMUM	RANGE MAXIMUM	AVERAGE	VARIANCE	NAME OF VARIABLE
18	27	9.0	39.2	20.5	7.8	ACTIVITY AREA 'B' COSTS ***
19	27	.7	10.3	4.2	2.5	ACTIVITY AREA 'C' COSTS ***
20	27	10.3	49.6	32.2	8.9	ACTIVITY AREA 'D' COSTS ***
21	18	1.1	4.8	1.8	.8	NUMBER OF VISITS PER PATIENT PER YR.
22	27	52.6	82.0	64.7	7.9	PERSONNEL COST ***
23	27	23.4	100.0	60.7	18.3	FULL-TIME PERSONNEL COST ***
24	27	.0	76.6	33.3	20.2	PART-TIME PERSONNEL COST ***
25	26	.0	26.3	6.2	7.0	VOLUNTEER PERSONNEL COST ***
26	27	4.9	20.7	10.6	4.3	COST OF INITIAL VISIT SERVICES ***
27	26	.0	4.1	1.4	1.2	COST OF MEDICAL TREATMENT ***
28	27	1.2	14.6	6.6	3.6	COST OF CONTRACEPTIVE RESUPPLY ***
29	27	1.7	13.2	5.7	2.9	COST OF MEDICAL FOLLOW-UP ***
30	26	.0	4.0	.5	1.0	COST OF NUTRITIONAL COUNSELING ***
31	26	.0	9.6	1.7	2.0	COST OF SOCIAL COUNSELING ***
32	27	.3	12.2	4.2	2.4	COST OF DATA AND RECORDS ***
33	27	.0	7.1	2.8	1.8	COST OF PERSONNEL DEVELOPMENT ***
34	27	.0	7.4	2.0	2.2	COST OF FISCAL MANAGEMENT ***

*** AS A PERCENT OF TOTAL PROGRAM COST

VARIABLE NUMBER	NUMBER OF PROGRAMS	RANGE MINIMUM	RANGE MAXIMUM	AVERAGE	VARIANCE	NAME OF VARIABLE
35	27	23.7	146.2	61.5	31.9	NEW PATIENT COSTS PER NEW PATIENT
36	22	23.2	387.2	117.8	97.5	CONTINUING PATIENT COSTS PER CONTINUING PATIENT
37	24	28.4	182.3	78.4	40.9	TOTAL PROGRAM COST ***
38	20	20.0	115.4	44.8	25.2	TOTAL PROGRAM COST PER VISIT
39	24	9.5	76.1	31.3	17.9	ACTIVITY AREA 'A' COST ***
40	24	3.4	45.0	16.3	13.3	ACTIVITY AREA 'B' COST ***
41	24	.3	9.7	3.4	2.4	ACTIVITY AREA 'C' COST ***
42	24	7.8	62.8	25.0	16.2	ACTIVITY AREA 'D' COST ***
43	24	18.1	187.5	72.7	41.6	ANNUAL COST PER ORAL CONTRACEPTIVE PATIENT
44	24	27.3	293.4	97.4	68.2	ANNUAL COST PER IUD PATIENT
45	18	26.3	141.9	71.0	33.7	ANNUAL COST PER DIAPHRAM PATIENT
46	8	(1.3)	106.8	48.4	35.1	COST PER MALE STERILIZATION
47	4	(25.8)	550.0	224.7	184.0	COST PER FEMALE STERILIZATION
48	27	5.2	105.3	28.3	18.8	RECRUITING COST PER NEW PATIENT
49	22	2.4	103.8	18.3	26.2	RETENTION COST PER CONTINUING PATIENT
50	21	.9	27.6	6.1	6.0	RETENTION COST PER REVISIT
51	21	12.3	66.5	28.8	15.0	TOTAL PERSONNEL COST PER VISIT

***PER UNDUPLICATED PATIENT

The large range of variance for certain variables should be noted. Contraceptive resupply, as a percent of the total program, ranged from 1.2% to 14.6%. This is a perfect example of the bias mentioned above. The material costs for contraceptive resupply, as a percent of total cost, for the various programs were relatively constant; the variances are mostly due to variations in the assignment of personnel time to this activity.

Similar problems were encountered in computing the annual method specific costs. Personnel might, for example, divide their time equally between the three most common methods (oral, IUD and diaphragm) while the method specific patient counts would not support such a division. In general data representing a high degree of aggregation of activity costs have more validity than lower level data. Thus, for example, more confidence can be placed in the total cost per unduplicated patient than in the annual method specific costs.

The reader must be cautioned against taking the averages too literally. In fact, the average total cost per unduplicated patient, $78.40, in Table IX represents the average program. The cost of serving the average woman is found by dividing the sum of the total costs by the total unduplicated patient count, yielding $66.00 per patient.

C. Comparative Methodology

The universe of NCFPS's family planning grantees is extremely heterogeneous. Indeed, WPC found that service providers funded through a single grantee, having common service areas and organizational structures, being of equal age and operating with approximately the same budget size, may vary considerably in their operational characteristics, patient loads and costs. The sample chosen for the survey is representative, in a statistical sense. That is, there are just the right number of old and new programs; small, medium, and large programs; Planned Parenthoods, health departments, and hospitals; etc. Because the representativeness is only statistical, all analyses must be based on valid statistical methods and all conclusions must be interpreted in a statistical sense. Thus, for example, we cannot say that "Small programs use a greater portion of their total cost for personnel than medium and large programs." We must qualify this statement; "At the 98% confidence level, small programs spend a larger portion of their budget..." This 98% confidence level means that there is only a 2% (100-98% = 2%) probability, i.e. 49 to 1 odds, that in fact they spend the same percentage. We must caution the reader that such statements do not imply that all small programs spend more for personnel than medium and large ones; this is simply a statement about the averages.

In many instances statements about the average are not sufficient. For example, it may be desirable to know how

the number of new patients during the study period is related to the size of the program, as measured by its total cost. A plot of data might show a general trend, but the plot does not quantify the degree of relationship between two parameters of the population. The simplest statistical technique that will accomplish this is the linear coefficient of correlation.

The linear coefficient of correlation gives, in a single figure, an assessment of the degree of relationship between two characteristics which is not clearly shown in a plot of the data or in a tabular presentation. It is calculated in such a way that its value may be either positive or negative, between +1 and -1. Either plus or minus one indicates complete dependence of one characteristic upon the other, the sign showing whether the association is direct or inverse; a positive value shows that the two characteristics rise and fall together; a negative value, that one falls as the other rises. The magnitude of the correlation coefficient indicates how closely the plot of data reflects the trends or corresponds most closely to a straight line drawn through the data points. Mathematically, the square of the correlation coefficient represents the percent of variation in either variable that can be attributed solely to changes in the other. Thus, if two variables have a linear correlation coefficient of .7, then 49% ($.7^2 = .49$) of the variation in either one is directly attributable to changes in the other; conversely, 51% (100% - 49% = 51%) of the variations are independent.

For example, to say that "The percentages of total personnel cost for full-time and for part-time personnel are highly negatively correlated" means that:

1) There is a straight line which is a very good fit to the data, and
2) they vary inversely, i.e., an increase in one is almost always coupled to a decrease in the other.

Similarly, to say that "There is a weak positive correlation between the number of new patients in the program during the study year and the size of the program, as measured by its total cost" means that

1) There is a straight line that is a reasonable but not a good, fit to the data, due to the scattered nature of the points, and
2) the tendency is for the two variables to increase, or decrease, together.

Note that the use of the word "positive" is optional; if no sense is stated, the positive one is implied.

The linear correlation coefficient detects uniform trends between pairs of variables; for example, when they both (tend to) rise and fall together. It is possible for a pair of variables to be exactly related and still have a very low linear correlation coefficient. One hypothetical example is shown in Figure 7.

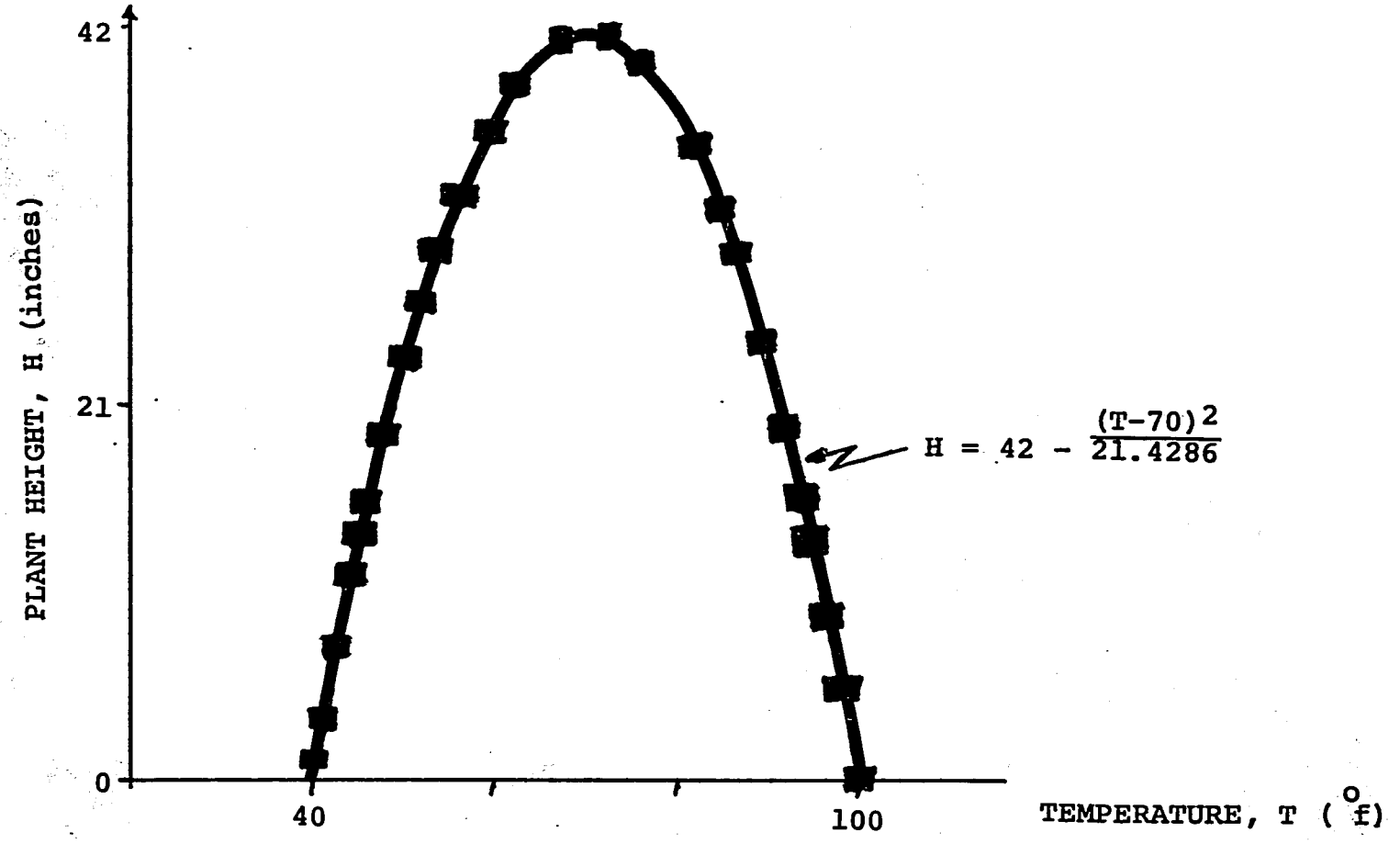


FIGURE 7 Hypothetical example of two exactly related variables whose linear correlation coefficient is very near to zero.

In this case, there is no straight line (linear) trend to the data; in fact, an increase in temperature can cause either an increase or a decrease in height.

Every pair of variables was tested for linear correlation. For quantifiable variables, this resulted in a linear correlation coefficient. If at least one of the variables was qualitative (e.g. service area, organizational affiliation), a rank correlation coefficient was computed. The occurrence of a high correlation between a pair of variables does not, however, imply causality; it simply indicates a statistically valid trend in their values. Table X typifies the correlation matrix. Note that any entry "******" indicates that for at least one of the variables there were less than six pieces of data available. To use the tables, find the variable number of interest from Table IX. Then find one of these numbers on the side of the table and locate the other one along the top. The number in the intersection of this row and column is the linear correlation coefficient for this pair. For example:

> From Table IX, we find that variables #15 and #16 are budgeted and unbudgeted cost as a percent of the total cost. Find one of them, say #15, along the side of table X and the other, #16, along the top. The correlation coefficient found is -1.000; indicating perfect negative correlation. In this example, this is appropriate since these two were related by the equation

## / ##	(13)	(14)	(15)	(16)	(17)
(1)	-.209	-.327	-.364	.365	.024
(2)	-.102	-.367	.002	-.003	-.149
(3)	.020	.066	.104	-.105	.027
(4)	.437	.124	.125	-.125	.159
(5)	.223	.557	.066	-.066	-.295
(6)	.412	.632	-.171	.170	-.050
(7)	.001	-.148	-.262	.263	.059
(8)	.144	-.036	-.026	.025	.178
(9)	.457	.731	-.302	.303	-.038
(10)	.015	.245	-.067	.066	.088
(11)	.307	.632	-.225	.226	.015
(12)	.375	.723	-.224	.226	-.014
(13)	1.000	.582	-.148	.149	.121
(14)	.582	1.000	-.049	.050	-.235
(15)	-.148	-.049	1.000	-1.000	-.024
(16)	.149	.050	-1.000	1.000	.022
(17)	.121	-.235	-.024	.022	1.000

Table X

Section of the Correlation Matrix

(Budgeted %) + (Unbudgeted %) = 100%.

Note that because the correlation coefficient between two variables is symmetric, the order of finding them in the table is irrelevant.

To detect relationships with low linear correlation, e.g. non-linear relationships and those involving several variables, a sort technique was utilized. In this method, the rows of observations (one per program) were sorted by each variable. Thus fifty-one tables were printed by the CANSSP program. For example, the 6th table presented program data sorted by Total Program Cost, variable #6. Inspection of these tables facilitated the analysis. The full set of fifty-one tables is in Volume 2. An example of the use of these tables follows.

Suppose it is desired to assess the effect of federal region on the total personnel cost per visit. The sorted table for either variable can be used; we will use the table for total personnel cost per visit, illustrated in Table XI.

The linear correlation between variables 7 and 51 is -.602, found either from the correlation matrix or the bottom line of the sorted tables. A statistical test indicates that this is very significantly different from zero (99% confidence level). An inspection of the column #7 shows that:

1) Programs in Region X were well below the average cost per visit.
2) Programs in Region II were significantly above the average.

DATA ORDERED BY TOTAL PERSONNEL COST PER VISIT

(51)	CODE#	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.3	01626	23	U	CO	MT	SSP	248117	4	1955	2336
13.4	00404	4	M	PP	MT	SSP	258292	5	1965	2991
13.7	02234	36	U	CO		IND	503586	10	1967	7122
14.7	P1726	29	U	PP		IND	170023	9	1935	2568
15.4	02235	37	U	PP		IND	420272	10	1937	6970
16.0	R1930	31	M	CO		SSP	398670	9	1963	4895
20.1	12132	33	S	CO		SSP	150450	9	1966	1879
20.8	01121	26	U	PI		IND	216974	6	1939	3155
24.3	02440	38	M	CO		SSP	173926	10	1966	1526
24.4	11323	20	R	CO		SSP	70718	4	1967	445
25.5	P0009	10	S	PP		SSP	280216	5	1964	1338
25.5	P1727	28	U	CO		IND	129220	9	1969	1237
26.0	52031	32	S	CO	MC	SSP	180862	9	1966	1475
31.0	K1222	27	R	HI		SSP	60396	4	1970	461
33.2	60710	11	U	PP		SSP	350209	5	1937	1849
33.2	01019	24	U	CI	MT	SSP	366401	6	1969	2819
34.9	10913	34	U	CI		SSP	469370	7	1969	3415
39.7	10811	12	U	OT	PP	INT	1001958	5	1969	8716
33.2	00303	3	U	CI		SSP	90469	2	1970	516
60.0	00150	19	U	PI	MT	IND	292310	5	1960	1620
66.3	00202	2	U	CO		SSP	462538	2	1969	1488
(51)		-.541	-.265	.392	.051	-.003	.144	-.602	.325	-.268

Table XI. SECTION OF SORTED VARIABLE TABLE FOR VARIABLE #51

3) Programs in Region IX were near or below the average.

4) Programs in Region IV, V and VI were reasonably randomly distributed.

An analysis, based on the average by region, indicates that the personnel costs per visit increase by region in the series X, IX, IV VI, V, and II. Further analysis, however, shows that II and V are not statistically different. Similarly, IV, IX, and X are not really different. We are finally led to the region order IV, IX and X; VI; II and V which statistically order the programs by increasing personnel cost per visit.

In many cases the degree of confidence associated with a conclusion based on the sample data is important. While most of our conclusions are statistically significant (conventionally taken as the 95% confidence level) some are not; we have tried to qualify all statements to include the degree of confidence afforded them by the data. For planning and evaluation purposes, it is certainly better to use only results that are as significant as possible, but some of the more tenuous ones do increase our intuitive understanding of the process by which resources are converted into services by various programs.

D. Significant Findings

Based on the site visits and the data, a new classification of programs differing from that used for the sample selection was developed. The three classifiers are independent (95%). The two most important factors which influence a

program's operation are size and age. The third was organizational affiliation. Size was measured by the stratification of Total Program Cost as shown in Table XII.

Table XII
Program Classification by Size

STRATA	TOTAL COST RANGE	NO. IN SAMPLE
Small	$ 0-100,000	4
Medium	$100,001-390,000	15
Large	$390,001, and above	8

*Note: There were no programs betweem $90,489, and $129,220. The boundary is conventionally taken as $100,000, but its exact value is unknown.

**Note: There were no programs in the sample with total cost between $366,401 and $398,670. The latter was classified as a Large program; the former, Medium. The exact boundary (if it exists) is unknown.

Program Age is measured by the year in which the program first provided family planning services. This classification is given in Table XIII.

Table XIII
Program Classification by Age

STRATA	RANGE	SUBRANGE	# IN SAMPLE
YOUNG*	1969-1970		12
		1970	5
		1969	7
OLD*	pre-1968		15
		1967	2
		1966	3
		1965	2
		pre-1965	8

*No program in the sample actually started providing services in 1968. Based on other data, however, 1968 programs are probably in transition between young and old, and may fit either, or neither, category.

The next most significant classification is by organizational affiliation. This breakdown is given in Table XIV.

Table XIV
Program Classification by Organizational Affiliation

STRATA	NO. IN SAMPLE	AVERAGE STARTING YEAR
Planned Parenthood	7	1956 (All Old)
Health Department	15	1966
County	11	1966
City	4	1966
Other (Including 2 hospitals, 2 multiple interrelated grantees and 1 OEO program)	5	1970

The sample WPC studied is very heterogenous. It was possible, however, to construct the above classification. The non-homogenity of the universe necessitates the use of statistical methods to validate our conclusion. Statements for which direct statistical tests were used are qualified by giving the confidence level associated with them. For example, the sentence:

"Planned Parenthoods spend 20% less than Health Departments in Area A Activities (99%)." has the following equivalent meanings:

1. The difference between Activity A as a percent of total program for Planned Parenthoods and Health Departments is significant to the 99% confidence level.
2. The probability is 1% (100% - 99% = 1%) or less than the hypothesis: "Activity Area A as a percent of total cost for Planned Parenthoods and Health Departments is the same," is true.

In any case, the higher the confidence level, the more confidence we have in the validity of the assertion. In general statistical work the 95% confidence level is usually taken as the lower level of significance, while the 98% level denotes extreme significance. We adhere to this general convention, but extend it as follows: If a statistical test yields a confidence level less than 95%, and, based on professional judgment, it is believed that some significance should be attached to the assertion, we will call it a "trend," to distinguish it from a "significant difference."

Similarly, we adopt a standard terminology for the correlation between two variables.

Table XV
Correlation Terminology

Terminology Used Here	Correlation Coefficient Magnitude Range
extremely correlated	.950 to 1.00
highly correlated	.800 to .950
strong trend (or correlated)	.700 to .800
trend, tend, related	.600 to .700
weak trend	.400 to .600
uncorrelated, random, etc.	0 to .400

Note: The adjective "positive" may not be used. If "negative" is not used, "positive" is implied.

To detect bias in the data caused by variations in site visit protocol, the order of visit was included in the comparative analysis. It is, of course, highly correlated to Federal Region; WPC planned its trip schedule that way. There is a surprising weak, negative trend to personnel cost per visit. This resulted, however, from the relationship between personnel cost per patient visit and Federal Region which was previously illustrated. WPC concluded that the order of visit introduced no bias into the data.

One caveat must be placed here. There are four small programs; three are rural. Two of the three small rural programs are also young. This may introduce some bias into the data, but an analysis of the remaining data shows that this is not the case. It is intuitively obvious that one cannot set up a large rural separable service provider, and thus these samples are probably representative.

Sites and Sessions

Six of the seven Planned Parenthoods are medium sized. Their average number of clinic sessions per month, 67, is very significantly greater than the average of the other medium sized programs, 33 sessions (98.5%). For the health department programs, there is a very nearly significant trend relating the number of clinic sessions to the total cost (90-95%). There is a slight trend for older programs to average more clinic sessions per month than younger ones, but this is not statistically significant (30%). These findings accord with the intuitive feeling that larger programs would have a larger number of clinic sessions per month; the larger discrepancies from this general trend include, for example, hospital-based postpartum programs. Figure 8 shows the averages by size and age for the non-Planned Parenthood programs. There is a similar weak trend relating the number of clinic sites to the total cost.

FIGURE 8

Average number of clinic sessions per month for non-Planned Parenthood programs by size and age

		Program Size			Average by age
		Small	Medium	Large	
Age	Young	19	36	74	47
	Old	13*	43	98	53
	Average by Size	17	40	81	

*Note: Based on a one program sample.

Budgeted and Unbudgeted Costs

The total cost of the family planning programs in the sample was divided into budgeted and unbudgeted costs. The two variables expressing these as a percent of the total cost are, of course, exactly related: their sum must be 100%. Neither of them correlates to service area, organizational affiliation, program size, or age. This finding indicates that, for example, the level of the unbudgeted portion of the total cost is a random variable, not affected by the program's setting. There is, however, a weak trend for the unbudgeted percent and the volunteer personnel cost percent to increase together. This seems to indicate that the unbudgeted portion tends to become larger when a significant amount of volunteer services are available.

Personnel Costs

The only variable that explains variances in the percent of total cost spent for personnel is the total program cost. There is a weak trend for the personnel percent to decrease with increasing size. Small programs spend very significantly more of their total cost for personnel than larger ones (99.9%), and they tend to spend more than medium ones (70%). The distinction between medium and large, however, is rather tenuous. The personnel cost percent does not seem to be affected by any other setting variables, including program age.

TABLE XVI

Average Personnel Cost as a Percent of Total Cost by Size

SIZE	AVERAGE PERSONNEL COST PERCENT
Small	72.9
Medium	61.4
Large	58.5

Full- and part-time personnel account for most of the personnel cost, and these two variables have a high negative correlation (-.940), indicating that an increase in one is almost always coupled to a decrease in the other.

In the classification by organizational affiliation, Planned Parenthood affiliates are the only single-purpose agency; all other organizations studied provide many other services. It is thus natural to expect that the data would reflect this situation. This is indeed true many times. One of the more obvious differences between Planned Parenthoods and, for example, health departments, is that Planned Parenthoods have considerably more full-time personnel costs related to their family planning projects than health departments (99%). Full-time personnel costs do not correlate to any other setting variable, including total cost and age. Neither does it correlate to volunteer personnel costs, indicating that these vary independently.

TABLE XVII

Average Percent of Total Personnel Cost for Full-Time Personnel by Organizational Affiliation

ORGANIZATION	AVERAGE FULL-TIME PERSONNEL COST PERCENT
Planned Parenthoods	76.5
Health Departments	53.9

There is a weak negative trend relating part-time and volunteer personnel cost percents, indicating that they tend to adjust to compensate for each other. The level of volunteer services does not correlate to total cost, organizational affiliation, or age.

Activity Area Cost Structure

One of the non-quantifiable findings of the site visits is that, as a group, Planned Parenthoods have more comprehensive, and more complete, records than any other service providers. There is, however, a quantum difference between the activity area cost structure of Planned Parenthoods and health departments.

TABLE XVIII

Average cost of Activity Areas As a Percent of the Total Cost by organization

Organization	A%	B%	C%	D%
Planned Parenthoods	36.5	20.4	5.5	37.6
Health Departments	45.8	22.1	3.2	28.9

Planned Parenthoods have less direct provision of family planning/medical services (A), measured against total cost, than health departments (99%). They also have larger community involvement (C) and management and administration (D) costs than the health departments (95%). There is no significant difference in the educational and social services (B) costs.

Decreases in A activities cost are accompanied by a trend toward higher B and D activities cost. Possibly as a result of the organizational structure shown in Table XVIII, together with the higher average full-time personnel cost percent in Planned Parenthoods, there is a trend for A activities cost to be a larger portion of the total program when there are more part-time (equivalently, less full-time) personnel costs.

Area B activities cost, as a percent of the total cost, tends to increase when area A decreases; it is uncorrelated to areas C and D. It is, however, highest in small rural programs (99%). It is larger in small programs than in medium and large areas (95%), and larger in rural programs than non-rural ones (99.9%). It is not clear which, if either of the two, is the main cause, but it must be mentioned again that 1) all rural programs in the sample were small, and 2) 75% of the small programs were rural. It is clear that one can believe the compound assertion (about small rural ones) and not know which, if either, of the other two is more operationally significant.

Area C percent is affected mainly by the organizational affiliation, but there is a weak trend relating it to the budgeted portion of the total cost. Area D, similarly, is negatively related to A. However, there is also a weak trend for D activities to increase, as a percent of the total cost, with both the number of clinic sessions per month and the personnel cost for full-time personnel. It is not clear, however, if this is independent of the dependency on organizational affiliation, shown in Table XVIII.

Much of the structural differences between Planned Parenthoods and, for example, Health Department programs is due to the nature of the former. As mentioned before, Planned Parenthoods are single purpose organizations. They then cannot spread, for example, management and administration time over several programs, each of which does not really require full-time effort. Similarly, space and equipment costs are applied solely to the family planning program; they cannot be shared with other projects.

A summary of the non-organizationally related activity cost structure model is presented in Table XIX. Together with Table XVIII, these constitute a total model for the activity area cost structure.

Note: A: Direct Provision of Family Planning Medical Services

B: Educational and Social Services

C: Community Involvement

D: Management and Administration (including all overhead and facilities)

TABLE XIX

Summary of Activity Area Cost Structure Model, Independent of Organizational Affiliation

AREA	TENDS TO INCREASE WITH	TENDS TO DECREASE WITH
A%	1. decreasing B% 2. decreasing D% 3. increasing part-time personnel % 4. decreasing full-time personnel %	1. increasing B% 2. increasing D% 3. decreasing part-time personnel % 4. increasing full-time personnel %
B%	1. decreasing total cost 2. decreasing population density (i.e. toward more rural) 3. decreasing A%	1. increasing total cost 2. increasing population density (i.e. away from rural areas) 3. increasing A%
C%	1. increasing budgeted % (equivalent, decreasing unbudgeted %)	1. decreasing budgeted % (equivalent, increasing unbudgeted %)
D%	1. decreasing A % 2. increasing # clinic sessions per month 3. increasing part-time personnel % 4. decreasing full-time personnel %	1. increasing A% 2. decreasing # clinic sessions per month 3. decreasing part-time personnel % 4. increasing full-time personnel %

Note A: Direct Provision of Family Planning Medical Services

B: Educational and Social Services

C: Community Involvement

D: Management and Administration (including all overhead and facilities)

Patient Load

Only two direct patient load indicators were investigated in detail: new and continuing patient counts. The unduplicated patient count is simply the sum of these two, and the visit count is highly correlated to the unduplicated count. Thus, once the new and continuing patient loads are known, the unduplicated count is known and then the visit count can be predicted.

New Patients

There are strong trends for the number of new patients to increase with both the total cost and the number of clinic sessions per month. Because the latter two are not statistically independent, total cost was used as the primary explanatory variable. In addition to the correlation between the new patient count and the total cost, there is also a statistically significant difference between the average new patient loads for the three size strata (95-98%). This information is tabulated in Table XX and presented graphically in figure 9.

TABLE XX

Average New Patient Load by Program Size

Size	New Patient Load
Small	526
Medium	2077
Large	4750

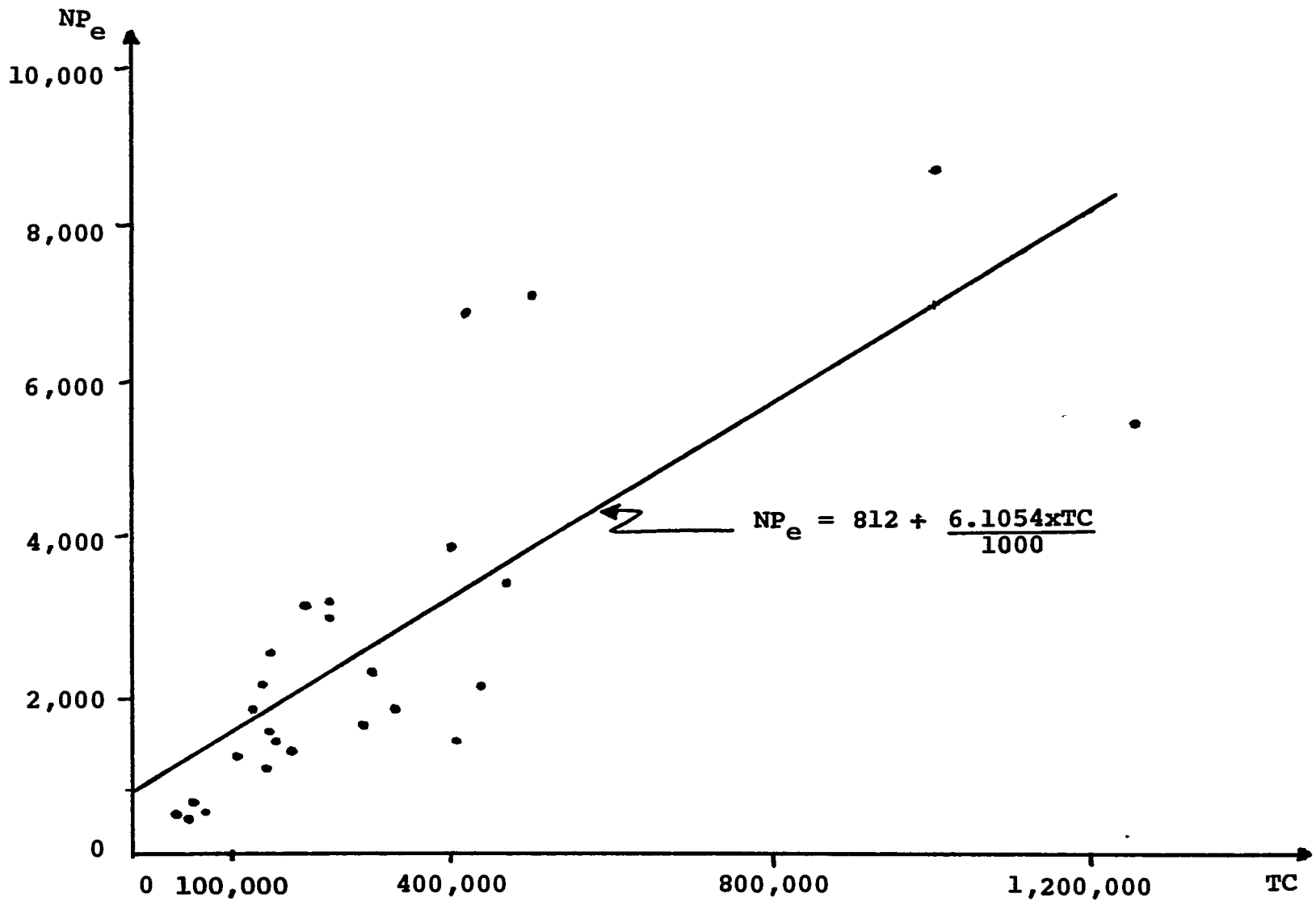


FIGURE 9 EXPECTED NUMBER OF NEW PATIENTS (NP_e) BASED ON TOTAL COST (TC) only

The data points exhibit a considerable amount of scatter about the regression line in Figure 9. This agrees with the interpretation of the correlation as only explaining 57% of the variation ($.756^2 = .57$). It is therefore reasonable to seek another factor which affects the new patient load. It was necessary to go outside the comparative analysis data base (51 variables) to the complete data base (about 450 variables) contained in the twenty-four individual grantee reports. WPC found that much of the variance for small and medium programs could be explained by the total cost for information and counseling per new patient expected on the basis of size alone. This is illustrated in Figure 10. The exact mathematical model is contained in Figure 11, but it can be paraphrased as follows:

> The new patient load increases linearly with program size and varies exponentially with the adjusted proportion of the total cost spent for family planning information and counseling.

It is unfortunate that the large programs did not conform to this model, but many of them are, in fact, a complex of highly interrelated service providers, no one of which is large. It is probable that the data for these large programs is too coarse, i.e. their interrelationships make separating their small and medium component programs impossible and thus the average figures are not representative of any type of program.

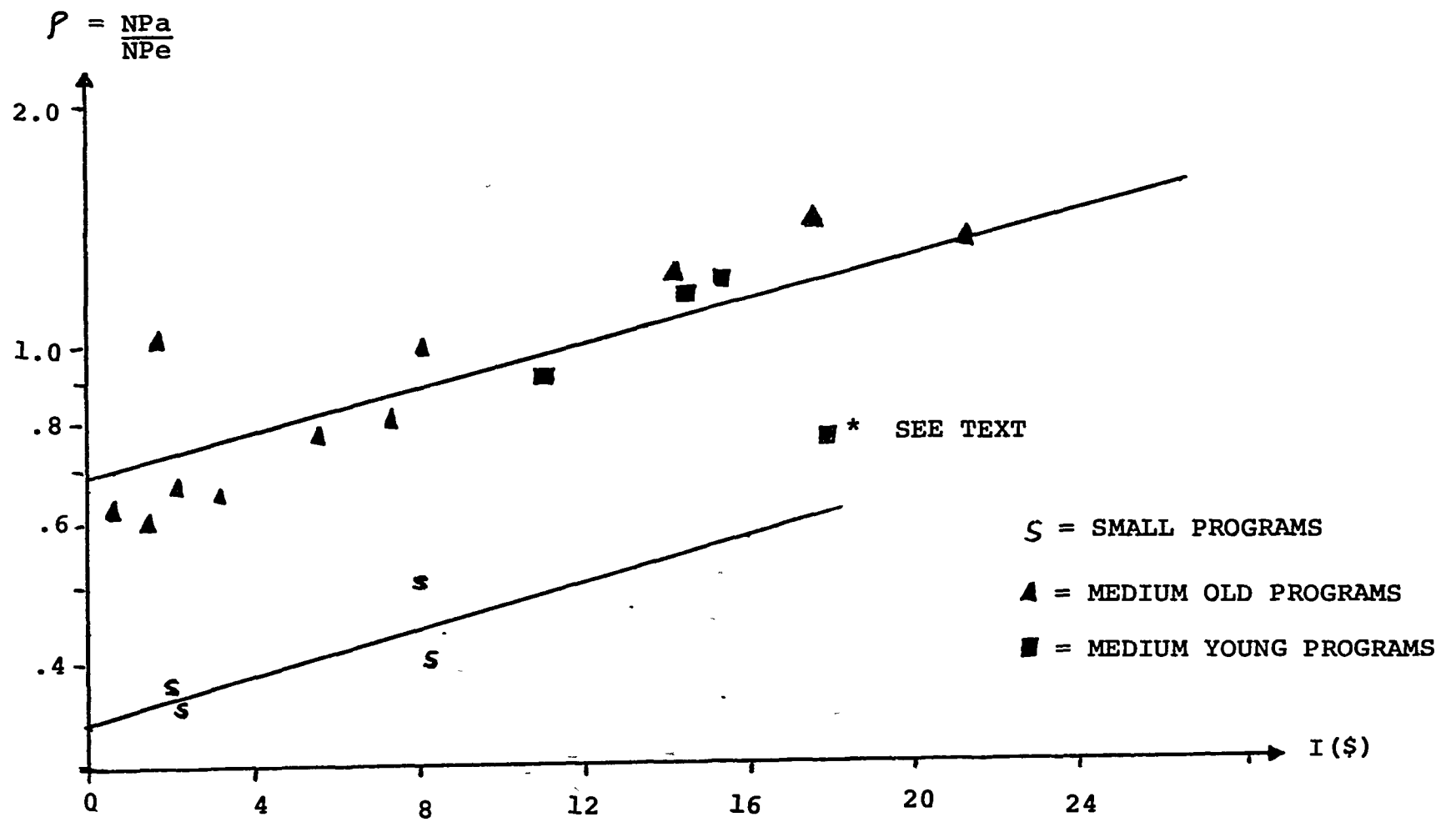


FIGURE 10 RATIO OF ACTUAL TO EXPECTED NUMBER OF NEW PATIENTS (ρ) VS. TOTAL COST OF FAMILY PLANNING INFORMATION & COUNSELING PER EXPECTED NEW PATIENT (I)

FIGURE 11

Mathematical Model for New Patient Loads in Small and Medium Programs

Let C = Total Cost of Program (in $1,000)

I = Total Cost of the Family Planning Information and Counseling Activity

then an estimate of the number of new patients is given by

$$NP = (812 + 6.1054C) \times R \times 10^{\frac{.0145I}{812+6.1054C}}$$

where

$$R = \begin{cases} .69 \text{ for medium programs} \\ .34 \text{ for small programs} \end{cases}$$

This model can be used to evaluate the effectiveness of family planning programs in recruiting new patients. The reader must be cautioned, however, that it can be applied only after the appropriate data are available. Thus one must know not only the total cost of the program, the direct cost of family planning information counseling, and the cost of activity areas C & D, but also the personnel costs in areas A & B and in the information and counseling activity, needed to properly allocate supportive costs, to compute the total cost of the information and counseling activity.

A further caution is necessary. The boundaries between size strata were based mainly on program cost per patient. It

seems, however, that this division may not be totally adequate for the new patient model. There is one medium program that is significantly far from the medium program model (see Figure 10); in fact it is closer to the small program model. Perhaps coincidentally, this program is the smallest medium program in the sample. It is also possible that there are exogenous variables which will explain variances from our model: there is nothing in our data to suggest that this program differs considerably from the other medium, or even young medium, programs.

For the total sample, program age seems to have very little effect on new patient loads. This is also true if one restricts the analysis to particular size strata. For example, there is only a 30% probability that the average new patient levels differ significantly between young and old medium programs. Age may have some significance however, if the analysis is restricted to programs of the same size and organizational affiliation. Young, medium-sized health department-based family planning programs have more new patients than old ones (95%).

TABLE XXI

AVERAGE NEW PATIENT LOADS FOR MEDIUM HEALTH DEPARTMENTS

AGE	NUMBER OF PATIENTS
Young	2,698
Old	1,670

Continuing Patients

The number of continuing patients is not highly correlated to any possible explanatory variable. In particular, there is only a weak positive trend relating it to the total cost, and it is uncorrelated to the new patient load. By a change of variables, however, WPC discovered a very significant factor affecting patient levels.

TABLE XXII

AVERAGE RATIO OF CONTINUING TO NEW PATIENT COUNTS

SIZE	$\frac{\text{CONTINUING PATIENTS}}{\text{NEW PATIENTS}}$
All Small	0.29
All Medium	1.12
Medium Planned Parenthoods	0.75
Medium Health Departments	1.32
All Large	0.53

Medium programs have a considerably higher average ratio of continuing to new patients than either of the other two size strata (99%). Among medium programs, Health Departments have a considerably higher ratio than Planned Parenthoods (95%). There is no significant difference between small and large programs' ratio (65%). It is significant, however, that the average ratio for large programs is between the small and medium figures: as before, most large programs are a network

of interrelated small and medium parts and thus one would expect it to fall between them.

Unduplicated Patient Counts

The new patient load is approximately proportional to the program size. Medium programs, however, have a disproportionately higher ratio of continuing to new patients, and thus a disproportionately larger number of continuing patients. Therefore, the unduplicated patient counts for medium programs will be larger, based on total cost, than for small and large programs. This relationship will reoccur later when we are considering per patient costs.

There is a strong trend for the unduplicated count to increase with the total cost. The deviation from this trend occurs mainly in medium programs, as described above. The unduplicated patient count also correlates to the number of clinic sessions per month; the latter, however, is not independent of the total cost. A model for estimating the unduplicated patient count can be constructed from the new patient model in Figure 11 and the average continuing to new patient ratios in Table XXII.

Visit Counts

The total visit count is highly correlated to the unduplicated patient count, and was thus not analyzed. An indirect

patient load indicator that was investigated is the average number of visits by a patient in the study year. This is highly correlated to the cost of activity area B as a percent of the total cost; there is also a trend for it to increase with the retention costs per continuing patient. These findings indicate that retention and follow-up efforts are successful.

There is also a trend for the visits per patient to be highest in rural areas; this may be due to the less crowded nature of rural programs. There also is a trend for the number of visits per patient to increase with the percent of the total cost spent for personnel. However, recalling that all of the rural programs were small, and thus had a higher personnel cost percent, these two trends are probably not independent. Lastly, there is an inexplicable weak trend for young programs to have a higher number of visits per patient than old ones.

Patient Costs

Almost all of the cost per patient variables are highly correlated. Program age is a significant explanatory variable for all of the cost indicators. Young programs, as a group, have higher unit costs than old ones (95%). Some of the cost indicators are relatively insensitive to program size; for others the size is a significant variable. For the latter

group of cost indicators, the group containing small old, small young, and large young programs costs about twice as much as the group containing medium young, medium old, and large old programs (98%). These trends are depicted in figures 12 and 13.

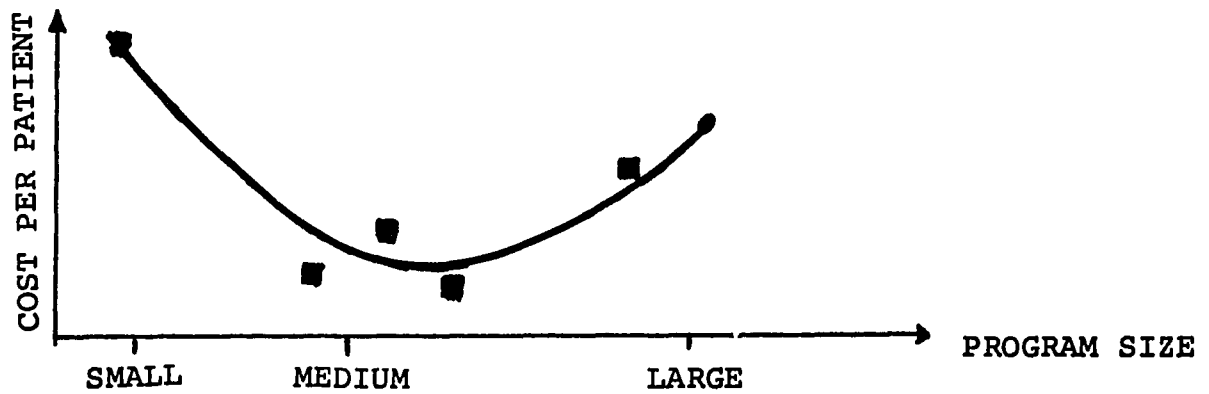


Figure 12a. Cost per patient trend by program size independent of program age

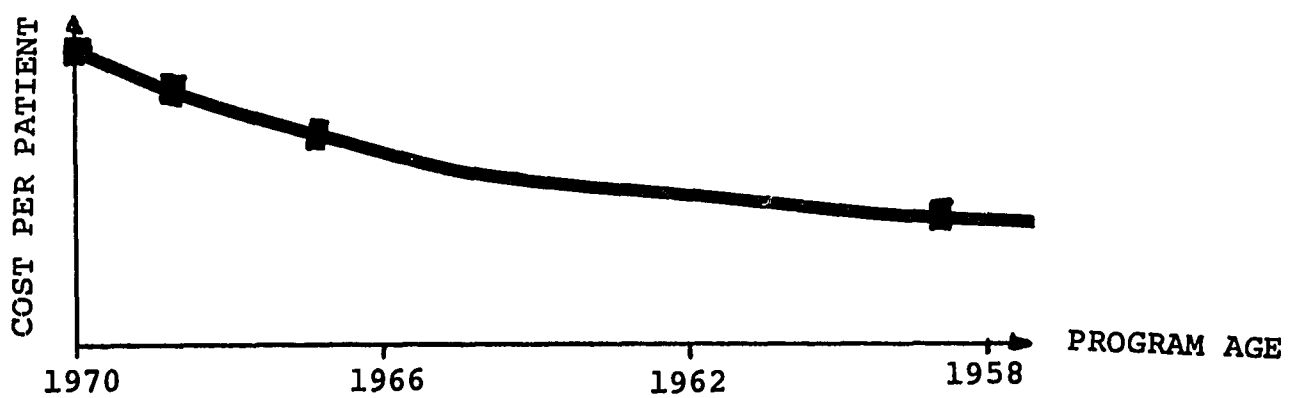


Figure 12b. Cost per patient trend by program age, independent of program size

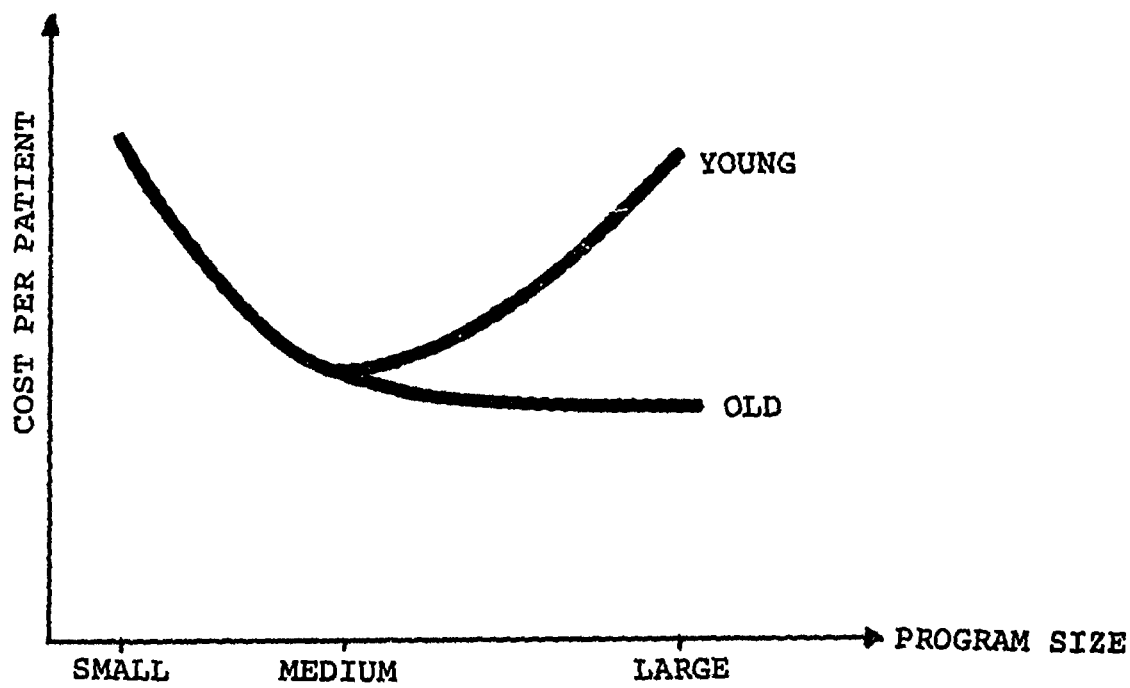


Figure 13. Cost per patient trend by program size and age

Total program cost per unduplicated patient was chosen as the primary cost indicator for two main reasons. First, it had the highest average correlation to the other cost indicators, thus making it the most valid predictional variable. Second, it represents the cost to the program needed to serve the average patient, thus making possible estimates of the number of women who can be served with the given resources.

COST PER UNDUPLICATED PATIENT

Figure 14*

Average total cost per unduplicated patient by program size and age.

		SIZE OF PROGRAM			AVERAGE BY AGE
		SMALL	MEDIUM	LARGE	
AGE	YOUNG	114	41	124	91
	OLD	115**	60	49	61
AVERAGE BY SIZE		114	55	96	

*Note: In this and subsequent figures, the shaded and unshaded area represent two groups of programs. Within each group there is no significant statistical difference in the cost figures.

**Note: Based on a sample of one program.

Young programs cost more than old ones (95%), and medium programs cost less than either small or large ones (95%). The average cost per patient in the group small young, small old, and large young is about twice the average cost in the group medium young, medium old, large old (99.9%). This is really

the best division that can be made: the confidence level for intragroup differences is less than 35%. This same pattern also holds for the total costs per unduplicated patient in health department.

Figure 15

Average total cost per unduplicated patient in Health Departments by program size and age

		SIZE OF PROGRAM			AVERAGE BY AGE
		SMALL	MEDIUM	LARGE	
AGE	YOUNG	97	41	136	82
	OLD	115*	52	53	53
AVERAGE BY SIZE		106	48	95	

* NOTE: Based on a sample of one program

WPC cannot present similar data for Planned Parenthoods; all of them in the sample were old, and all but one are medium. However, it can be concluded that the average medium old Planned Parenthood cost per patient, $69, is not statistically significantly different from the health department average, $52.

Other Cost Indicators

The annual cost per oral and IUD patient indicators follow the same pattern as the cost per unduplicated patient.

Figure 16. Average annual cost per oral patient by program size and age

AGE	SIZE OF PROGRAM			AVERAGE BY AGE
	SMALL	MEDIUM	LARGE	
YOUNG	107	37	114	91
OLD	109*	54	47	57
AVERAGE BY SIZE	108	45	89	

* NOTE: Based on a sample of one program

Figure 17. Average annual cost per IUD patient by program size and age

		SIZE OF PROGRAM			AVERAGE BY AGE
		SMALL	MEDIUM	LARGE	
AGE	YOUNG	167	45	158	130
	OLD	94*	74	51	70
AVERAGE BY SIZE		149	67	118	

* NOTE: Based on a sample of one program

New Patient Costs per New Patient were almost twice as high in young programs as in old ones (99%). Large old programs are significantly less expensive than all others combined (96%), and medium programs are less expensive than small and large young ones (95%). This may also follow the same pattern as the previous ones, but the small sample of small old programs does not afford such a statistical conclusion.

Figure 18. Average New Patient Costs per New Patient by program size and age.

		SIZE OF PROGRAM			AVERAGE BY AGE
		SMALL	MEDIUM	LARGE	
AGE	YOUNG	75	53	105	80
	OLD	51*	51	31	47
AVERAGE BY SIZE		69	51	77	

*Note: Based on a sample of one program.

The final cost indicators that were investigated were the per visit figures. Figure 19 shows the personnel and non-personnel components of the total cost per visit. Both of these are extremely highly correlated to the total cost per visit. In particular, this correlation of total and personnel cost per visit was surprising, because the portion of the total cost spent for personnel decreases and the total visit count increases with increasing total cost. It does indicate, however, that these trends are weak. Based on the small sample size and due to the difficulty of getting visit counts, these conclusions are very tentative. There is, however, a significant difference between young and old programs (99%).

Figure 19. Average Cost per Visit by Program Size and Age

PROGRAM AGE	SIZE OF PROGRAM (TOTAL COST)			TOTAL AVERAGE BY AGE
	SMALL	MEDIUM	LARGE	
YOUNG	$42 personnel $20 non-personnel $62 TOTAL	$29 personnel $31 non-personnel $60 TOTAL	$47 personnel $39 non-personnel $81 TOTAL	71
OLD	$29 personnel $ 6 non-personnel $30 TOTAL *	$25 personnel $12 non-personnel $37 TOTAL	$15 personnel $10 non-personnel $25 TOTAL	33
TOTAL AVERAGE BY SIZE	49	39	53	

*Note: Based on sample of one program

CONCLUSION

The primary purpose of the sample study was to gather comparative data which can be used to estimate and project service costs on a national basis. WPC, therefore, focused much of its effort on the determination of factors which most influenced the cost of providing family planning services and the number of women served. Recognizing that various organizations, having different philosophies and goals, emphasize different aspects of the level and scope of provided services, WPC has identified those major components of the cost structure that are influenced by the various organizational styles.

Several general conclusions can be drawn from the comparative analysis. One of the most significant is the potential non-existence of the large program. Indeed, in many respects they appear as averages of their small and medium components. In cost per patient, however, there are some indications that large programs differ from the others. In these cases, however, the effect is classical, i.e. young programs cannot effectively handle a large resource base. Medium programs seem to be the most cost effective. This is due to their larger than expected patient load, in particular they have disproportionately more continuing patients than small and large programs. Large old programs cost about the same as medium ones while having proportionately fewer patients.

There are two possible explanations: First, there may indeed be economies of scale that compensate for the lower patient load. Second, most of their components may have evolved to medium size from smaller units.

The major structural effect of program size is the trend toward decreasing the portion of the total cost spent for personnel with increasing size. Most of the other structural findings are directly related to organizational affiliation. Valid statistical conclusions can be drawn about Planned Parenthoods and Health Departments only; the others constitute too small a sample. For these two there are differences that are statistically significant.

It was, of course, impossible to include every cost and structure variable and impractical to attempt to explain completely the variances of those we used. There are over 450 possible variables presented in the grantee reports, and over 1500 can be constructed as meaningful combinations of these. WPC extracted 51 of the most significant variables to perform its analysis; these are presented in Volume 2. By use of these tables, or the individual grantee reports, it is possible to perform similar analyses to reach other meaningful conclusions. This type of analysis can provide answers to basic programmatic and operational problems.

PROJECT STAFF

NATIONAL CENTER FOR FAMILY PLANNING SERVICES

Dorsey Delavigne - Budget Analyst, Project Officer

George Koenig - Grants and Contracts Management Specialist

Stanley Tillinghast -Management Analyst, OPPE

WESTINGHOUSE POPULATION CENTER

Michael Reardon, M.P.A., M.P.H. - Associate Director, Project Manager

James Allen, B.A. - Senior Management Analyst

Lang Beran, B.A. - Health Statistician

Gary Damkoehler, M.A. - Managing Director

Sigrid Deeds, M.P.H. - Associate Director

Jean Diksa, M.A. - Research Associate

Norman Dresner, M.A. - Computer Scientist

Ann Hamilton, M.B.A. - Consultant in Economic Analysis

Olive Johnson - Associate in Health Records Management

Warren Robinson, Ph.D. - Consultant in Economic Demography

Allen Rosencrantz, M.P.A. - Accounting and Financial Management Specialist

M. Sullivan, M.S.(Hygiene) - Research Associate

S. Tokarski, M.B.A. - Research Associate

Support Staff

Robert Blakey
Peggy Davidson
Florence Grimm
William Honey
Della Hughes
Lucy Hunt
Mary Karhu
Katherine Perdue
Dan Study
Thea Westrich

PROGRAM DEFINITIONS

The following standard definitions have been utilized to insure comparability between data collected from the sample grantees:

Acceptor: A patient who is registered and who has accepted one of the contraceptive methods, i.e., has been sterilized, has had a loop inserted, a diaphragm fitted, or has agreed to use (and has received a supply of) one of the following methods: orals, condom, jelly, foam, cream, rhythm charts and supplies.

Activity: Any purposeful use of personnel and/or facilities and equipment time by a program to accomplish a goal consistent with its medical and social objectives.

Active Patient: An acceptor who is making the required number of follow-up visits specified by policy of the agency and who has given no overt indication that he or she has ceased contracepting. Note: Preferred standards of medical care from NCFPS five year plan should be used, e.g.,

a) "Oral contraceptive patients
Return visit not later than three months after initial physical examination, followed by six-month visits thereafter.

b) I.U.D. patients
Return visit not later than three months following insertion, with at least annual visits thereafter.

c) Other patients
Choice of a method other than oral

contraceptives and I.U.D.'s does not require a follow-up visit for medical review or an examination related to the method chosen. However, efforts should be made to encourage the patients to return whenever they wish additional supplies; and at a minimum, on an annual basis for follow-up care for general health purposes."

Class: An organized educational or informational activity conducted by program personnel for patients in family planning and/or related topics.

Class Session: One particular class held for two or more persons by a program employee for some specified time period. A class meeting three times a week would be considered to have three sessions.

Clinic Site: Any location or place where family planning services are provided on a regularly scheduled basis under the direction of a physician, nurse or nurse-midwife, including mobile clinic vans or trailers.

Clinic Session: An organized session providing family planning services at which there is either a physician, nurse, or nurse-midwife in attendance, and which has a scheduled time for service, i.e., days and hours are specified.

Contact: An encounter aimed at promoting interest and/or general awareness of family planning (e.g., movie, exhibit, booth, speech, pamphlet distribution, etc.).

Drop-Out: A patient who has not kept the scheduled appointment for a revisit, and/or

has not made contact with or has not been contacted by the facility after the date of a missed appointment, according to the policy of the center relating to the type of contraception.

Follow-Up: An encounter with a patient already registered in the family planning program to remind her of her next appointment or inquire about her reasons for not attending sessions. This may be by personal or telephone contact or by mail.

Outreach: The efforts devoted to identifying, informing, educating and recruiting prospective patients to family planning services including personal visits or group presentations by personnel from the program (paid or volunteer) and preparation and distribution of pamphlets or other material.

Patient: An individual who has completed an initial interview with program personnel and for whom there is an "intake" form. This patient may be a transfer from another agency. He or she may make one or more visits to the facility.

Service: The specific functions performed for or on the patient, e.g., examination, advice, consultation, dispensing medication, laboratory test. Example: A patient who comes to the facility and during the visit sees a physician for examination, a nurse for advice, a technician for a laboratory test, and a pharmacist for medication would be counted as one visit and would have received four services

Visit: An encounter by the patient, male or female, with the facility for one or more of the following services: consultation, counseling, examination, treatment, medication, or testing. If more than one service is given during the encounter, it is one visit.
There are two types of visits:

a) Initial: The first that an individual has with the facility, usually at the time of registration.

b) Revisit: Subsequent visits to the facility after having been registered, to keep an appointment, to report a complication, to have a test, to receive a re-supply of pills. Revisits can be thought of as being of four sub-categories: complications, re-supply, check-up, or annual examination.

ACTIVITY DEFINITIONS

The activities which could be performed by a family planning program have been divided into four groups.

Group A Direct Provision of Family Planning Medical Services includes all activities which are concerned with the actual provision of family planning medical services in a clinical medical setting.

1. Registration and medical records: initial enrollment and taking of medical history for new patients; registration and updating of medical history for continuing patients; maintenance of medical records and reports for all patients.

2. Initial medical examination and contraceptive supply: clinical examination of a new patient excluding laboratory work; provision of a contraceptive device, contraceptive method, or supplies including the necessary counseling on proper usage. Specific methods include;

   a) Oral contraceptives
   b) Intra-uterine device
   c) Diaphragm
   d) Condoms
   e) Foam
   f) Spermicidal creams and jellies
   g) Chart for practicing rhythm
   h) Sterilization
   i) Other contraceptive methods .

3. Laboratory testing: Preparation, analysis, and reporting of laboratory tests performed on new and continuing patients.

4. Infertility treatment or referral.

5. Medical treatment or referral: Necessary follow-up for patients with complications or suspected medical problems.

6. Contraceptive resupply for patients using:
   a) Oral contraceptives
   b) Condoms
   c) Foam
   d) Spermicidal creams or jellies
   e) Rhythm charts
   f) Other contraceptive methods.

7. Medical follow-up and re-examination of patients using:
   a) Oral contraceptives
   b) I.U.D.
   c) Diaphragm.

8. Routine annual or regular physical examinations for all patients.

Group B Educational and Social Service Activities include those activities designed to identify, contact and recruit potential patients together with the activities designed to make potential patients aware of the availability of family planning services.

1. New patient recruitment: outreach efforts including the preparation and distribution of pamphlets and materials; personal contact with potential patients.

2. Specific family planning information and consultation: information on the various types of contraceptive methods and availability of services; provided to specific individuals or groups prior to or after the provision of contraceptive services.

3. Continuation follow-up activities: telephone calls, personal visits and reminders of clinical appointments to insure continuous participation in the family planning program by contraceptive acceptors.

4. Logistical assistance: provision of transportation to and from clinic sessions, provision of babysitters, and help with domestic tasks to promote clinic attendance.

Group C Community Involvement Activity includes efforts to promote individual and group support for the purposes and objectives of the family planning program in the context of general community-social action activities, without specifically attempting to identify or recruit individual patients.

1. Community support: Development and implementation of public relations programs using mass media, promotional events, speakers; the distribution of general information aimed at creating understanding and acceptance of the concepts of the family planning program.

2. Recruitment of volunteer and paid family planning workers from the local neighborhood or community.

3. Community and consumer participation in family planning development and evaluation services: includes working with consumer or community advisor boards or groups and providing training to those groups.

4. Organizational coordination with other community service groups providing health or family planning services: includes

working with coordinating councils and contacting other community agencies or service organizations.

Group D Management and Administration Activities includes the logistical and administrative support activities for the entire program.

1. Data record preparation for program analysis and statistical reporting purposes: includes use of the National Center for Health Statistics reporting forms but excludes individual patient medical history and record forms.

2. Personnel development and training activities designed to improve job skills and performance of program employees: includes planning and conducting of in-service and off site training programs and attendance at conferences and workshops.

3. Planning and evaluation of program objectives and activities: includes both formal and informal efforts using data from the National Center for Health Statistics patient reporting system, financial records and other program information.

4. Administrative coordination with other service organizations concerning day-to-day operational aspects of family planning delivery systems.

5. General management and administrative activities which provide direction, standardization, regularization and con-

trol for all other project activities or functions: includes a) personnel management; b) supply management; c) fiscal management; d) facilities management; e) equipment management; f) general supervision.

COST DEFINITIONS AND EXPENDITURE CATEGORIES

Categories of Expenditure

Personnel
- Physicians
- Psychologists and Other Independent Professionals
- Nurses (PHN, RN, & LPN)
- Other Formally Trained Technicians
- Para-Medical and Outreach Personnel

Outside Services
- Consultants - In Center
- Consultants - Outside Center
- Contractual Services - In Center
- Contractual Services - Outside Center
- Data Processing

Travel
- Local Travel
- Out-of-town Travel

Space Costs and Rentals
- Rental of Space
- Utilities
- Other

Consumable Supplies
- Supplies

Equipment
- Buildings - Fixed Equipment
- Office Furniture
- Vehicles
- Other Equipment
- Rental of Equipment

Other
- Insurance & Bonding
- Publications, Printing & Subscriptions
- Repairs and Other Services
- Overhead
- Telephone, Telegraph & Postage

Employee Benefits (When not recorded as part of personnel payroll costs)

FICA - Employer's Share
Insurance
Retirement Plan Contributions
Hospitalization
Other

Other Functional Costs

Donated Personnel Services
Donated Outside Services
Donated Space, Etc.
Donated Consumable Supplies
Donated Capitalized Assets
Donated Other
Consumption of Capitalized Assets

Depreciation Buildings - Fixed Equipment
Depreciation Office Furniture
Vehicle Depreciation
Depreciation Other Movable Equipment
Supplies Issued
Expired Prepaid Expenses

These definitions also lend themselves well to further functionally - oriented sub-divisions and re-aggregation.

OBJECT ACCOUNTS

Major categories and individual Object Accounts, with Definitions

PERSONNEL

Salaries Charges to this account include the gross amount of employee salaries and wages paid and accrued (before any payroll deductions) including all payments for personal services of full-time, or temporary nature other than services provided as professional or technical consultants.

Salary Equivalents Charges to this account include the gross amount of all contributed salaries and wages including the value of volunteer time contributed, as well as the actual cost of time contributed by employees paid by other agencies. Included also are all fringe benefits relative to time contributed by employees of other agencies such as payroll taxes, annual leave, and other normal employee benefits. (This account is separately established so that the other accounts will tie in with employee payroll records.)

Employee Payroll Taxes — Charges to this account are amounts paid or accrued for F.I.C.A. (O.A.S.I.) taxes, unemployment taxes, and other taxes based upon payrolls not including payroll taxes withheld from employees' earnings. (Individual accounts may be maintained for each type of tax.)

Employee Benefits — Charges to this account are amounts paid or accrued for benefits which are provided for employees, including retirement contributions, hospitalization and life insurance, workmen's compensation, etc. (Individual accounts may be maintained for each type of benefit.)

General Cost Definitions

Budgeted cost is that which has been obtained from the records of the service provider, except that it has been made time oriented. It includes both project and in-kind or matching costs.

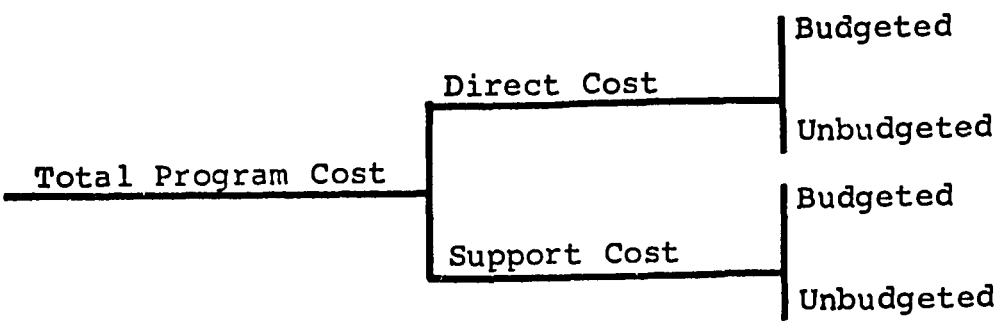
Unbudgeted cost is that which does not appear in the records of the service provider. It, too, is time oriented, and may be either donated, such as volunteer labor or the free use of facilities, or it may be cost paid directly by another agency.

Direct cost is the budgeted or unbudgeted cost which is directly attributable to the performance of a specific activity or activities. Direct costs, when available, were collected for each activity in the four activity areas (see section III). The costs in Group B,C, and D Activity areas, while direct in themselves are in certain calculations considered to be supportive of other activities, i.e. Group D costs are supportive of Group C, B and A costs; Group D and C costs are supportive of Group B and A costs and finally Group D,C, and B costs are supportive of Group A costs.

Support cost is the budgeted or unbudgeted cost of an activity or activities when considered for calculation purposes as being supportive of other activities. The pro-ration of support costs is made on the basis of the direct personnel costs (salaries plus fringe benefits) of the activity to which support costs are to be applied.

Total program cost includes all program costs during the study period; direct, support, budgeted and unbudgeted.

The relationship between the various costs is illustrated as follows:



Specific or Method Specific cost is the sum of the direct and/or support costs of those activities which specifically relate to a type of patient, visit or contraceptive method.

General or Basic cost is a pro-ration of the direct and/or support costs of activities which relate to all patients, visits, or contraceptive methods applied to a specific type of patient, visit or contraceptive method.

OUTSIDE SERVICES

All such, whether from individuals (doctors on contract) or firms. (Note: With the activity breakdown, there is only one object account in this "Major category").

TRAVEL

Patients and Contacts

Charges to this account include cost of local public transportation to move patients and contacts from one site to another during the day or to provide patients and contacts who would otherwise be unable to participate in programs or services with transportation to and from site of grantee programs or services. In rare instances, where no public transportation is available, private transportation (such as taxi or chartered bus for groups) may also be included. Excluded are non-transportation costs and personal expenses of patients or contacts.

All other Travel

All travel and related costs for persons other than patients and contacts (based on policy).

SPACE COSTS

Rental of Space

Charges to this account will include payments and accruals of rent for space or buildings occupied pursuant to lease agreements.

Leasehold Improvements and Repairs

Charges to this account will include repairs and renovations to leased facilities or buildings other than repairs and renovations furnished by lessor including special costs to convert space to meet program needs.

Utilities

Charges to this account include payments for water, electricity, gas, heat, etc., not furnished by the lessor under the lease agreement.

Maintenance

Charges to this account include payments for maintenance, janitorial, extermination and refuse collection services, where not furnished by lessor of property.

Other Space Costs

Charges to this account include payments for space-related costs such as security services, moving costs between locations, etc.

SUPPLIES

Office Supplies

Charges to this account include payments and accruals for all types of office supplies of a consumable nature including writing instruments, ink, stationery, printed forms, reproduction, and photocopying supplies, and all other supply items commonly used in office operations.

Program Supplies and Minor Equipment

Charges to this account include payments and accruals for consumable supplies used by patients including contraceptives and drugs.

Maintenance Supplies

Charges to this account include payments for maintenance or janitorial supplies such as cleaning materials, soap, disinfectant, paper towels, etc.

Other Consumable Supplies

Charges to this account include payments and accruals for special types of consumable supplies not classified in the preceding accounts.

OTHER EXPENSES

Insurance and Bonding

Charges to this account include payments of insurance premiums for all types of insurance which protect the grantee against loss but excluding insurance which benefits employees.

Publications Printing, and Subscriptions

Charges to this account include payments and accruals for publications and books, subscriptions to periodicals, newspapers, etc., as well as printing costs of interim and annual grantee reports, newsletters and informational materials, recruitment materials, employee tests, etc. Not included are costs of printed accounting, procurement, personnel and other administrative forms (which should be charged to Office Supplies).

Repairs and Other Services

Charges to this account include payments and accruals for services including repairs and maintenance of office equipment and furniture, program equipment, photographic services, mailing and typing services, and other non-professional, non-technical services.

Employee Development and Recruitment

Charges to this account include payments and accruals for the development of current employees. Included are dues to professional organizations, tuition and seminar fees, and educational programs, as well as recruitment funds for new employees. This last advertising for employees, relocation expenses or allowances, background and credit investigations, and other costs are relative to improving developing and securing personnel.

Telephone and Telegraph

Charges to this account include payments for telephone instruments used and service facilities including installation costs and local and long distance charges, as well as telegraph, TWX, cables, and other electronic communications costs.

Postage, Freight, and Express

Charges to this account include payments for postage including stamps and special handling costs, freight and express charges, and any other costs of transporting materials, documents, or communications.

Equipment Leased or Rented

Charges to this account include payments and accruals for the rental or lease of equipment used by the grantee

in administrative or program activities.

Other Expenses

Charges to this account include payments and accruals for other administrative or program costs not classifiable in one of the foregoing accounts.

CAPITAL EXPENDITURES

Equipment

Charges to this account include payments and accruals for purchases of equipment including office machines, furniture, fixtures, and program equipment.

Other Capital Expenditures

Vehicles, Buildings, etc., (classified to meet individual case needs).

SCHEDULE OF EQUIPMENT VALUES

ITEM	AVERAGE PRICE	ESTIMATED LIFE (YRS.)	UNIT ANNUAL VALUE
Adding Machine	$ 196	10	$ 19.60
Addressograph	275	15	18.33
Air Conditioners (window)	200	10	20.00
Anesthesia units	700	15	46.66
Autoclaves	550	20	27.50
Auto-delivery	3,500	4	875.00
Auto-passenger	3,000	4	750.00
Benches	62	20	3.10
Blood Clot timers	125	15	8.33
Blood counters	750	15	50.00
Blood pressure unit	36	3	12.00
Bottle Washers	1,200	10	120.00
Cabinets, wood metal	73	20	3.65
Cabinets, solution	550	15	36.66
Calculators	300	10	30.00
cash register	200	10	20.00
Centrifuge	100	15	6.66
Chairs wood/ metal	50	20	2.50
Chairs, specialist	130	15	8.66
Chairs, wheel	150	15	10.00
copiers	251	10	25.10
Desks	198	20	9.90
Dictating equipment	150	10	15.00

ITEM	AVERAGE PRICE	ESTIMATED LIFE (YRS)	UNIT ANNUAL VALUE
Duplicators	$ 263	15	17.53
Electro-cardiograph	850	10	85.00
Floor Waxer	100	7	14.30
Incubator (laboratory)	150	15	10.00
Lamps, Emergency	20	15	1.33
Lights examining	65	10	6.50
Meters, PH	500	10	50.00
Microscope	300	10	30.00
Mobile units/ Vans	6,000	5	1,200.00
Polishers, floor	75	10	7.50
Projection machine	225	15	15.00
Projection screen	50	10	5.00
Refrigerator	300	10	30.00
Scale	77	10	7.70
Sofa	180	10	18.00
Sterilizer	500	20	25.00
Stool (doctor)	70	10	7.00
Tables, examining	750	15	50.00
Tables, wood/metal	100	20	5.00
Tables, Obstetrical	1,200	20	60.00
Transcribing equipment	230	10	23.00

ITEM	AVERAGE PRICE	ESTIMATED LIFE (YRS)	UNIT ANNUAL VALUE
Tapeplayer	$ 100	10	10.00
Typewriter	300	10	30.00
Vacumn Cleaner	80	10	8.00
X-Ray developing tanks	175	10	17.50
X-Ray Film Drier	110	10	11.00
X-Ray processor	6,500	10	650.00
X-Ray machines	20,000	10	2,000.00
X-Ray machines, mobile	6,500	10	650.00

GENERAL SERVICE ADMINISTRATION

STANDARD SPACE RATES

G.S.A. RATES-fully serviced per year per square foot.

	PLACE	RATE
1.	Augusta, Georgia	$ 4.50
2.	Boise, Idaho	5.50
3.	Dayton, Ohio	6.00
4.	Eagle Pass, Texas	5.00
5.	East Orange, New Jersey	5.00
6.	El Centro, California	4.80
7.	Flint, Michigan	5.20
8.	Fort Worth, Texas	5.50
9.	Gainesville, Georgia	4.00
10.	Gary, Indiana	5.50
11.	Hartford, Connecticut	7.50
12.	Indianapolis, Indiana	6.50
13.	Kansas City, Missouri	5.00
14.	Newark, New Jersey	7.50
15.	San Bernadino, California	4.50
16.	San Jose, California	5.40
17	Savannah, Georgia	4.75
18.	Seattle, Washington	7.00
19.	Syracuse, New York	6.50
20.	Toledo, Ohio	5.00
21.	Tulsa,Oklahoma	5.75
22,	Tuscon, Arizona	6.00
23.	Ventura, California	4.80
24.	West Palm Beach, Florida	4.50
25.	Wilmington, Delaware	6.90

PRORATION OF SUPPORT COSTS

PRORATION OF SUPPORT COSTS

Discussed here is the final series of cost allocations. Prior to these allocations total direct cost applicable to each function was determined. Each of these direct cost totals consisted of one or more of the following elements:

1. Personnel Cost: Consists of all salaries including the value of volunteer labor and labor furnished by other agencies without charge. Also included in the total personnel cost for each function are the following:

   Actual employee benefits and payroll taxes, added to all direct labor at a fixed percentage based on their proportionate totals. (Example: If these costs are $10,000 and total payroll is $100,000, then total employee Personnel Cost for each function is 110% of the payroll cost which was distributed to the function.)

   For labor from volunteers and other agencies, "employee benefits and payroll tax equivalents," will be added on at the same percentage as for employees. Every function within A, B, and C (but not necessarily within D) will have its individual total Personnel Cost.

2. Annual Replacement Value of Equipment

3. Other Costs (operating cost other than salaries, including any donated values)

After these totals are arrived at, the basis on which all costs was allocated is the proportionate Personnel Cost of the functions to which each allocation is made. This is a three-step process, as follows:

1. Allocate total D costs among all the functions within A, B, and C.
2. Allocate resulting total C costs (including its share D costs) among all the functions within A and B.
3. Allocate resulting total B costs (including its share of D and C costs) among all the functions within A.

The accompanying table illustrates how this total process was accomplished, using simplified hypothetical figures. The explanation of the different columns in this table on page A-29 is as follows:

Column 1--This is total Personnel Cost for each function as defined above. The subtotals are shown to clarify this illustration. In practice, these costs (and all other) will be further subdivided by individual function.

Column 2--Total of Equipment and Other Costs as defined above.

Column 3--Summary figures for total Direct Cost. Note that after each step in this allocation process (columns 5, 7, and 9) this total is unchanged.

Column 4--Total Direct Costs for Function D are allocated here among the A, B, and C functions in proportion to the Personnel Costs within A, B, and C. The total to be allocated (180) turns out to be 20% of the total allocation base of 900 (bottom subtotal in column 1), so the figures for the top portion of column 4 are calculated by taking 20% of the corresponding figure in column 1.

Column 5--Column 3 plus Column 4. At the completion of this process, we have this "loaded" cost for each function within A, B, and C: Direct Cost plus allocated Administration and Management (D). (This measure is probably most useful for the functions within C.)

Column 6--Similar allocation of the total cost of C (including its share of D costs). The applicable percentage in this example is 27.5% (220 from column 6 divided by 800 from column 1).

Column 7--Here for A and B (and in the actual study for each function within these categories) we have its direct cost plus its applicable share of all C and D costs. The total costs at this level will probably be the the most useful way of viewing the "B" services, and, if carefully defined, may also be useful in the analysis of A activities.

Column 8--This is the final step in the allocation process. Not shown here are the detailed functions within A, among which, as before, the total cost of B (including its share of D and C costs is allocated. The allocation ratio is 395 (from column 7) divided by 600 (from column 1), or 65.833%.

This allocation process was completed as in column 9 with a distribution of the total agency costs for the subject period among each of the individual functions within Category A. These figures, together with work counts, were used to arrive at the total unit costs of each measured activity.

"ILLUSTRATION OF COST ALLOCATION PROCESS"

Column Number:	1	2	3	4	5	6	7	8	9
Function Group	Direct Cost Personnel	Direct Cost Other	Total	Allocate D	Sub-total	Allocate C	Sub-total	Allocate B	Total
A	600	200	800	120	920	165	1085	395	1480
B	200	100	300	40	340	55	395	-395	---
Sub Total	800	---	---	---	---	---	---	---	---
C	100	100	200	20	220	-220	---	---	---
Sub Total	900	---	---	---	---	---	---	---	---
D	100	80	180	-180	---	---	---	---	---
Total	1000	480	1480	---	1480	---	1480	---	1480

WORKSHEETS AND INSTRUCTIONS

INSTRUCTIONS FOR COMPLETION OF HEADER ON ALL FORMS

Block 1 Worksheet Number - preprinted on form.

Block 2 Region - HEW geographical region 0 through 9.

Blocks 3 and 4, Strata Code Numbers, 1 small old metropolitan, 2 small old non-metropolitan, 3 small young metropolitan, 4 small young non-metropolitan, 5 medium old metropolitan, 6 medium old non-metropolitan, 7 medium young metropolitan, 8 medium young non-metropolitan, 9 large old metropolitan, 10 large old non-metropolitan, 11 large young metropolitan, 12 large young non-metropolitan.

Blocks 5 and 6 Grantee - to be assigned by WPC starting with 01 for Hartford and 02 for Syracuse.

Source - persons providing information entered on form.

Blocks 7 and 8 Service Provider - numberical sequence starting with 01 for Hartford, 02 for Syracuse (to be assigned in advance by WPC).

Blocks 9 and 10, Number of Clinics - actual number of clinics for each service provider.

Blocks 11, 12 and 13 Cost Category - code numbers from personnel summary or cost summary worksheet.

Blocks 14 and 15 Like Items - enter the number of persons or items in a cost group included on the cost/time distribution worksheet. For example, if the time is being distributed for 3 physicians who perform similar functions, the entry would be 03 in blocks 14 and 15.

Blocks 16 and 17, Hours Per Week - enter the hours per week being distributed on cost/time distribution worksheet. For example, a physician working 37 hours in an average workweek would have the figure 37 inserted in blocks 16 and 17.

Blocks 18 through 22, Amount Paid - enter the dollar amount being distributed; obtained from either worksheet number 2, or worksheet number 3. In the case of multiple personnel performing similar activities and working the same hours, enter the total annual salaries for these personnel in blocks 18 through 22.

Block 23 Type - this indicates the type of cost or personnel being distributed: F - full time; P - part time; V or U - volunteer or other agency, and in kind for non-personnel costs; and A - actual for accounting costs.

Block 25 Units - To indicate the type of distribution being made on the cost/time distribution worksheet. H = hours; $ = dollars; P = percentage.

Reference - use this space to refer to the individual whose time is being distributed. This is a cross check with the entry on worksheet number 2 personnel summary.

Source - enter the source of the information on this sheet.

By - Initials of person completing sheet.

Date - date of site visit.

Grantee - use written name.

Service Provider - use written name.

WORKSHEET NO. 1 PROFILE DATA

Pg. 1 - para 1. Enter required information.

Pg. 1 - para 2. Service Providers: in addition to name of service provider and address, indicate a contact for necessary follow-up with telephone number.

Pg. 2 - para 3. Budget for Study Year: Column 1 - HEW - identify if NCFPS, MIC, or other HEW unit; under 'Other' specify private funds, Planned Parenthood, or fees for services. Column 2 - include all amounts budgeted for the year being studied. Column 3 - include total current grant amounts and period of grants; e.g. eighteen-month grant from HEW for x dollars from x date to x date.

Pg. 2 - para 4. Historical background: Column 1 refers to service provider numbers assigned on page 1; Columns 2 and 3, dates of initial funding by HEW, OEO e.g. 1957, HEW funding; 1960 OEO funding; Column 4, funding by agencies other than HEW or OEO e.g. Planned Parenthood 1934 or County Health Department 1956. Use a separate block for each funding agency or organization.

Pg. 3 - para 5. One page is to be filled out for each service provider, indicating the clinics with numbers assigned in numberical sequence. The service provider number is the same as that on Pg. 1, para 2. For example, if service provider 01 had three clinics, lines 1 through 3 would be used and would contain 1, 2, and 3, respectively in Column 1. Column 2 contains the address, Column 3, the total patients served; Column 4, the total number of visits by the patients served for each clinic; Column 5, the hours per week that the clinic is open between 8 a.m. and 5 p.m.;

Column 6, the hours per week that the clinic is open other than normal 8 to 5 schedule; e.g. convenience hours on evening or week-ends. If a clinic does not operate on a weekly basis, indicate the basis in Column 8. In Column 7, code relates to the characteristics of each clinic. If there is more than one service area or primary service population, indicate as many numbers as appropriate, e.g. code C could be 1-6 primary service population-black college students. Code D is primarily service population as a percentage of total service area population.

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PROFILE DATA

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO [1] (1) PG 1 OF 3 BY ___ DATE _____

REGION [ ] (2) STRATA [ ] (3 4) GRANTEE [ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ] (7 8) _____ NO. CLINICS [ ] (9 10)

STUDY PERIOD FROM _____ TO _____

1. GRANTEE: _____

NCFPS Grantee Number _____

Address: _____

COUNTY

Phone Number _____

Grant Title _____

Director - Name _____

Title _____

2. SERVICE PROVIDERS NAME ADDRESS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

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WORKSHEET NO [1] PG 2 OF 3 BY ____ DATE ____

REGION [ ] STRATA [ ] GRANTEE [ ] ____ SOURCE ____

SERVICE PROVIDER ____ NO. CLINICS [ ]

3. BUDGET FOR STUDY YEAR BY SOURCE OF FUNDING

(1) Funded by	(2) Total Annual Amount	(3) Total Grant Amount and Period Covered
HEW (Identify)		
OEO		
Other (Specify)		
Total		

4. HISTORICAL BACKGROUND OF FUNDING FOR SERVICE PROVIDERS: Name of Public & Private Agency, by date of Initial Support

(1) CODE	NAME	(2) HEW	(3) OEO	(4) Public or Private Agency, by Date of Initial Support			
1							
2							
3							
4							
5							
6							
7							
8							

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PROFILE DATA

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WORKSHEET NO [1] PG 3 OF 3 BY ____ DATE ____

REGION [ ] STRATA [ ] GRANTEE [ ] ____ SOURCE ____

5. OPERATING CLINICS

(1) SERVICE PROVIDER NO ____

Clinic No. (2)	Address (2)	Annual Unduplicated Patients (3)	Annual Visits (4)	Hr. Wk. 8-5 (5)	Hr. Wk. Other (6)	CODE (7) A	B	C	D	REMARKS (8)
TOTAL										

CODE A TYPE OF CLINIC

1. Single Purpose/free standing
2. In Health Dept.
3. In Hospital
4. Other Multipurpose Clinic
5. Mobile Van
6. Church/School/Etc.
7. Variable Location (Mobile Clinic

CODE B SERVICE AREA

1. Inner City
2. Model City
3. Other Urban
4. Suburban
5. Rural

CODE C PRIMARY SERVICE POPULATION

1. Black
2. American Indian
3. Other Minority
4. White
5. Teenagers
6. College Students
7. Other (Specify)

CODE D SERVICE POPULATION AS % OF TOTAL POPULATION

INSTRUCTIONS FOR COMPLETING WORKSHEET NO 2 PERSONNEL SUMMARY

Header completed through block 10. A personnel summary worksheet should be completed for each service provider.

Column 1 is the computer code for each job category. Column 2 is a serial number for each of the individuals within the job category. Column 3, the first initial and last name for each of the persons working for the service provider during the study period. This information can be obtained from the payroll records for the study period and in the case of volunteer or other agency workers from interviews with the head of the service provider organization or the appropriate operating supervisors. For reference purposes the numbers in column 1 and 2 become the identification number for each person e.g. 0021 would be the first physician listed. This number is used as a reference when completing worksheet number 7 cost/time distribution. Column 4 is the average hours worked per week. Type 1, 2, or 3 is the type of employment or service of the individual , 1 is full-time, 2 is part-time, 3 is volunteer or other agency, (this would include family planning workers who are paid for out of, for example, a health department budget but who actually work for the family planning program without a charge to the family planning project budget as well as volunteers who contribute their time as family planning workers. Place an x is the appropriate box.

Column 5, months worked, is the total number of months worked by the individual employee during the study period. This is important in the case of employees who started working at midyear. Column 6 is the amount of money paid in salary to the employee during the study period. In the case of volunteer workers an equivalent annual salary should be assigned. In the case of other agency workers the actual other agency costs should be determined.

Every person who worked for the family planning program should be identified and included on the service provider personnel summary. Remember these are job titles only and do not necessarily relate to actual functions performed: e.g. Category 009 appointment Clerk may in fact do intake work, this will be shown, however, through the completion of the cost/time distribution worksheet.

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PERSONNEL SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 2 (1) PG 1 OF 7 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	(2) P.T.	(3) VOL O.A.	5 Mos. Wk'd	6 AMOUNT PAID
001		MEDICAL-DS: Direct Service Delivery						
002		PHYSICIANS:						
	1.							
	2.							
	3.							
	4.							
	5.							
	6.							
	7.							
	8.							
	9.							
	10.							
003		NURSES: Registered and Public Health						
	1.							
	2.							
	3.							
	4.							
	5.							
	6.							
	7.							
	8.							
	9.							
	10.							

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PERSONNEL SUMMARY

WORKSHEET NO [2] (1) PG 2 OF 7 BY ____ DATE ____

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

REGION [ ] (2) STRATA [ ][ ] (3 4) GRANTEE [ ][ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ][ ] (7 8) _____ NO. CLINICS [ ][ ] (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	(2) P.T.	(3) VOL O.A.	5 MOS. WK'D.	6 AMOUNT PAID
004	1.	NURSES: Practical						
	2.							
	3.							
	4.							
	5.							
	6.							
	7.							
	8.							
	9.							
	10.							
005	1.	NURSES: Aides-Orderlies & Clinic Assistants						
	2.							
	3.							
	4.							
	5.							
	6.							
	7.							
	8.							
	9.							
	10.							

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PERSONNEL SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO [2] (1) PG 3 OF 7 BY ___ DATE ___

REGION [ ] (2) STRATA [ ] (3 4) GRANTEE [ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ] (7 8) _____ NO. CLINICS [ ] (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	5 TYPE (2) P.T.	5 TYPE (3) VOL O.A.	5 MOS. WK'D.	6 AMOUNT PAID
006	1.	TECHNICIANS: Laboratory						
	2.							
	3.							
007	1.	TECHNICIANS: X-Ray						
	2.							
008	1.	MEDICAL RECORDS: Clerical/Secretarial						
	2.							
009	1.	APPOINTMENT CLERKS						
	2.							
	3.							
010	1.	PHARMACISTS						
	2.							
011	1.	CLINICAL PSYCHOLOGISTS						
	2.							
012		OTHER (Specify)						

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PERSONNEL SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/73

WORKSHEET NO 2 (1) PG 4 OF 7 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	TYPE (2) P.T.	TYPE (3) VOL O.A.	5 MOS. WK'D	6 AMOUNT PAID
	1.							
	2.							
013		ES: EDUCATIONAL & SOCIAL SERVICES						
014		SOCIAL WORKERS/COUNSELORS						
	1.							
	2.							
	3.							
	4.							
015		NUTRITIONISTS						
	1.							
	2.							
016		NEIGHBORHOOD/COMMUNITY WORKERS/HEALTH AIDES						
	1.							
	2.							
	3.							
	4.							
	5.							
	6.							
	7.							
	8.							

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PERSONNEL SUMMARY

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APPROVAL EXPIRES 4/30/72

WORKSHEET NO 2 (1) PG 5 OF 7 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	(2) P.T.	(3) VOL O.A.	5 MOS. WK'D.	6 AMOUNT PAID
017		BABYSITTERS						
	1.							
	2.							
	3.							
018		DRIVERS						
	1.							
	2.							
	3.							
019		INTAKE CLERKS						
	1.							
	2.							
020		HEALTH EDUCATORS						
	1.							
	2.							
021.		OTHER (Specify)						
	1.							
	2.							
	3.							
	4.							
022		CI: COMMUNITY INVOLVE-MENT						
023		PUBLIC INFORMATION OFFICER						

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PERSONNEL SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/

WORKSHEET NO [2] (1) PG 6 OF 7 BY ____ DATE ____

REGION [ ] (2) STRATA [ ][ ] (3 4) GRANTEE [ ][ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ][ ] (7 8) _____ NO. CLINICS [ ][ ] (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	5 TYPE (1) F.T.	(2) P.T.	(3) VOL O.A.	5 MOS. WK'D	6 AMOUNT PAID
	1.							
024		FUND RAISERS						
	1.							
	2.							
025		BOARD/COORDINATING COUNCIL MEMBERS						
026		OTHER (Specify)						
	1.							
	2.							
	3.							
	4.							
027		MA: MANAGEMENT & ADMINISTRATION						
028		ADMINISTRATORS/MANAGERS						
	1.							
	2.							
029		TRAINERS						
	1.							
	2.							
030		SECRETARIES						
	1.							
	2.							
	3.							
	4.							

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PERSONNEL SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/7

WORKSHEET NO [2] (1) PG 7 OF 7 BY ____ DATE ____

REGION [ ] (2) STRATA [ ][ ] (3 4) GRANTEE [ ][ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ][ ] (7 8) _____ NO. CLINICS [ ][ ] (9 10)

1 CODE	2 NO	3 CATEGORY NAME	4 HR PER WK	TYPE (1) F.T.	TYPE (2) P.T.	TYPE (3) VOL O.A.	5 MOS. WK'D.	6 AMOUNT PAID
031		CLERKS/TYPISTS						
	1.							
	2.							
	3.							
	4.							
	5.							
032		BOOKKEEPERS/ACCOUNTANTS						
	1.							
	2.							
033		RECEPTIONISTS						
	1.							
	2.							
034		CUSTODIANS/HANDYMEN						
	1.							
	2.							
	3.							
035		OFFICE ASSISTANTS						
	1.							
	2.							
	3.							
036		OTHER (Specify)						

INSTRUCTIONS FOR USE OF WORKSHEET 3

SCHEDULE OF COSTS

The purpose of this worksheet is to record and distribute all functional costs. Column (1) lists the cost categories. Column (2) lists the code numbers. Place an x in column (3) if a separate cost spread sheet is prepared for the specific cost category. Columns 4 through 9 are for cost distribution. See notes (a) through (d). In most cases, the amount entered in column 4 or column 5 will simply be re-entered in column 6, 7, 8, or 9. The most probable functional distribution is indicated by the heavily outlined boxes. However, do not hesitate to use boxes that are not heavily outlined if this will distribute the costs more accurately by function. Furthermore, when practical and possible, the amount charged to a particular function can be further subdivided, either on the worksheet itself (as for patient supplies) or on a cost spread sheet (see note (f)).

Explanatory Notes:

(a) Total functional cost of the indicated type for the subject year. Consists of (b) plus (c).

(b) Budgeted expenditures are actual costs during the year as shown by the agency's books. Enter each such cost in the upper half of each applicable box. The "object accounts" which the agency uses for classifying these expenditures will <u>not</u> be identical to the lines on this worksheet. Nevertheless, these costs must be divided as well as possible among these lines. Also, the total entered in column (b) must agree with the total of such costs as shown by the agency's books.

(c) Unbudgeted expenditures are actual or estimated costs

not shown in the agency's books. Examples for this worksheet include donated supplies and space contributed by another agency. Estimate the annual value of each item, if any, and enter this amount in the lower half of each applicable box.

(d) For each dollar amount entered in the budgeted column, show its distribution by function, using upper portion of box (es). Similarly, for any dollar amount entered in theunbudgeted column, show its distribution by function, using lower portion of box (es).

(e) This category includes all major outside or contractual services which can not be stated in terms of an hourly rate. (If they can be stated in terms of an hourly rate, enter them on Worksheet 2 also and check column 3).

(f) On lines marked in this way for medical services and for drugs, it is expected that amounts entered in the last four columns are really summary figures which can and should be further subdivided. Wherever this is the case, do the following:

--Check column 3

--Attach a "cost spread sheet", properly identified, showing the complete distribution.

(g) Use a separate line for each additional type of outside service, if any. The functional category depends on the type of service (e.g., use category D for CPA audit).

(h) If a particular geographic location (such as a referral clinic on a college campus) performs only Educational and

Social Services, show its costs in Column B only. More likely all space costs will be column D. For unbudgeted space cost, use estimated gross annual rental rate per square foot for comparable facilities in this area, times estimated square footage, times (if applicable) the proportion of a forty hour work week that these facilities are used (i.e., if used 10 hours per week, use 25%).

(i) Examples: refuse collection, security services, moving costs between locations, pest control.

(j) Use this line only if the accounting records have such a classification, i.e., for unique medical or non-medical supplies other than those coded as 503 or 602. More likely this line will be left blank.

(k) Enter totals in column 6 and complete cost spread sheet and patient supply inventory. The total "budgeted cost" for contraceptives derived in this way will not "tie in" to the agency's accounting records. For the resulting necessary adjustment see (m).

(m) This line will be used for "balancing". For example, if the agency has one object account for all medical and patient supplies, including drugs, enter in the bottom half of column A on this line the difference (plus or minus) between the total the agency charged to this object account and the total that you have entered as "budgeted costs" in this same column A.

(n) If available, enter in column A the cost of medical

malpractice insurance.

(o) Enter in column B the estimated cost of printing related to outreach and promotion.

(p) Examples: equipment and furniture repair, mailing and typing services.

The unbudgeted costs to be entered in column 5 will be estimated by: (a) calculating the ratio of budgeted costs for the same purpose to budgeted salaries; and (b) applying this ratio to the total for unbudgeted salaries. The resulting amounts will be distributed among the various functions in proportion to the distribution of direct salaries.

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COST SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 3 (1) PG 1 OF 4 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF _____

(1) COST CATEGORY	(2) CODE	(3) Cost Dist. Sheet	(4) Annual Expenditures (a) (b) Budgeted	(5) (c) Unbudgeted	(6) Distribution by Functional Activity (d) A	(7) B	(8) C	(9) D
A. PERSONNEL ▲	100							
1. Salaries	099	X						
2. Employee Payroll Taxes	098	X						
3. Employee Benefits	097	X						
B. OUTSIDE SERVICES (e) ▲	200							
1. Physicians (f)	201	X						
2. Laboratory	202							
3. X-Ray	203							
4. Other (g)	204							
5. Other	205							

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COST SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 3 (1) PG 2 OF 4 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF _____

(1) COST CATEGORY	(2) CODE	(3) Cost Dist. Sheet	(4) Annual Expenditures (a) (b) Budgeted	(4) Annual Expenditures (a) (c) Unbudgeted	(5) Distribution by Functional Activity (d) A	B	C	D
6. Other	206							
C. TRAVEL ▲	300							
1. Patients/Contacts	301							
2. All Other	302							
D. SPACE COSTS (h) ▲	400							
1. Rental of Space	401							
2. Improvements and Repairs	402							
3. Utilities	403							
4. Other (i)	404							

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COST SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 3 (1) PG 3 OF 4 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

(1) COST CATEGORY	(2) CODE	(3) Cost Dist. Sheet	(4) Annual Expenditures (a) Budgeted (b)	(4) Annual Expenditures (a) Unbudgeted (c)	(5) Distribution by Functional Activity A	B	C (d)	D
E. SUPPLIES ▲	500							
1. Office Supplies	501							
2. Program Supplies (j)	502							
3. Patient Supplies (k)	503	X						
4. Maintenance Supplies	504							
5. Other Consumable Supplies (m)	505							
F. OTHER EXPENSES ▲	600							
1. Insurance and Bonding (n)	601							
2. Publications Printing and Subscriptions (o)	602							
3. Repairs & Other Services (p)	603							

Westinghouse Population Center
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COST SUMMARY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 3 (1) PG 4 OF 4 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

(1) COST CATEGORY	(2) CODE	(3) Cost Dist. Sheet	(4) Annual Expenditures (a) (b) Budgeted	(4) Annual Expenditures (a) (c) Unbudgeted	(5) Distribution by Functional Activity (d) A	B	C	D
4. Employee Development (Training)	604							
5. Telephone and Telegraph	605							
6. Postage, Freight and Express	606							
7. Medical Equipment Leased or Rented	607							
8. Other Equipment Leased or Rented	608							
9. Medical Equipment Purchased	609							
10. Other Equipment Purchased	610							
11. Other Expenses	611							
12. Equipment value (from Worksheet 5)	612	X						
13. Other	613							

INSTRUCTIONS FOR COMPLETING WORKSHEET NO. 4 - PATIENT SUPPLY INVENTORY

Header should be completed for blocks 1 through 10. This form should be filled out for each service provider.

Enter all available, relevant information on this worksheet. Where cost figures are not available on a unit basis, the total cost for each type of contraceptive should be entered and calculations made following the interviews. Numbers donated would be contributions from Planned Parenthood, pharmaceutical firms, etc. In the last column (08009) drugs and other contraceptives should be combined; for example, C film and/or penicillin would both be entered.

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PATIENT SUPPLY INVENTORY

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 4 (1) PG 1 OF 1 BY ____ DATE ____

REGION ☐ (2) STRATA ☐☐ (3 4) GRANTEE ☐☐ (5 6) _____ SOURCE _____

SERVICE PROVIDER ☐☐ (7 8) _____ NO. CLINICS ☐☐ (9 10)

COST CATEGORY ☐☐☐ (11 12 13) LIKE ITEMS ☐☐ (14 15) HRS. PER WK ☐☐ (16 17)

AMOUNT PAID ☐☐☐☐☐ (18 19 20 21 22) TYPE ☐ (23) UNITS ☐ (25) REF _____

	08002 Oral Contra-ceptives (no. of cycles)	08003 Condoms (no. of pieces)	08006 Jelly, creme (no. of tubes)	08004 Foam (no. of cans)	08001 I.U.D.'s no.	08005 Dia-phragms	08007 Rhythm charts & supplies	08009 Other (Specify)
Stock at beg. of year								
Acquired during year								
Subtotal								
Dispensed during year								
Stock at end of year								
Average Unit Cost								
Number Donated								

INSTRUCTIONS FOR COMPLETION OF WORKSHEET NO. 5-CAPITAL EQUIPMENT

Header blocks 1 through 10 to be completed. A worksheet should be filled out for each service provider.

Column 1 is total items in use by the service provider's clinics. Column 2 are those pieces of equipment that are actually owned by the service provider. Column 3 are those items which are on loan or owned by another agency and used without payment. Columns 4,5, and 6 will be used to calculate total annual value. Column 7 is the percentage of time that the equipment in column 3 is used.

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CAPITAL EQUIPMENT

WORKSHEET NO 5 (1) PG 1 OF 2 BY ___ DATE ___

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

ITEM	CODE	(1) TOTAL IN USE	(2) OWNED	(3) OTHER	(4) EST LIFE	(5) UNIT ANNUAL VALUE	(6) TOTAL ANNUAL VALUE	(7) % of USE
Accounting/bookkeeping machine	101				8			
Adding machines	102				10			
Air conditioners (window)	103				10			
Anesthesia units	201				15			
Autoclaves	202				20			
Automobiles, delivery	104				4			
Automobiles, passenger	105				4			
Benches, metal, wood	106				20			
Blood clot timer units	203				15			
Blood counters	204				15			
Bottle washers	205				10			
Cabinets, metal & wood	107				20			
Cabinets, solution	206				15			
Calculators	108				10			
Cash registers	109				10			
Centrifuges	207				15			
Chairs, metal & wood	110				20			
Chairs, specialist	208				15			
Chairs, wheel	209				15			
Copiers	111				10			
Desks, metal and wood	112				20			
Dictating equipment	113				10			
Duplicators	114				15			

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CAPITAL EQUIPMENT

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 5 (1) PG 2 OF 2 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

ITEM	CODE	(1) TOTAL IN USE	(2) OWNED	(3) OTHER	(4) EST LIFE	(5) UNIT ANNUAL VALUE	(6) TOTAL ANNUAL VALUE	(7) % OF USE
Electrocardiographs	210				10			
Floor waxing machines	115				7			
Lamps, emergency	211				15			
Lights examining	212				10			
Meters pH	224				10			
Microscopes	213				10			
Mobile units/vans	215				5			
Polishers floor	116				10			
Projection machines	117				15			
Sterilizers	216				20			
Tables, examining	217				15			
Tables metal & wood	118				20			
Tables obstetrical	218				20			
Transcribing Equipment	119				10			
Vacuum cleaners	120				10			
X-ray developing tanks	219				10			
X-ray film driers	220				10			
X-ray film processors	221				10			
X-ray machines	222				10			
X-ray machines-mobile	223				10			
Other	001							
Other	002							
Other	003							
Other	004							

INSTRUCTIONS FOR COMPLETION OF WORKSHEET NO.6

ACTIVITY DISTRIBUTION

This worksheet will be used as direct input to the keypunch operators so clarity and neatness is important. All information in the header should be completed through block 10. The attached list of functions describes the activities indicated. Wherever possible, both the number of activities performed, as well as the number of patients or persons who benefited from these activities should be indicated.

NOTE: Activities with a dark triangle near the code number are totals and should not be entered if the subtotals are entered. In practice, they can be entered and then the subtotal broken down and the totals crossed out or erased. When a breakdown of laboratory tests by type is available complete Worksheet 6A-Laborarory Test Distribution.

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ACTIVITY DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 6 (1) PG 1 OF 5 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF _____

ACTIVITY	CODE	NO. UNITS OR ACTIVITIES PERFORMED	PERSONS OR PATIENTS SERVED	REMARKS
Initial Visits (new to program)	AAAAA			
Revisit (first visit this year)	BBBBB			
Revisit (not first this year)	CCCCC			
1. SERVICE RELATED ▲	01001			
A. Direct Provision Family Planning Medical Services ▲	02001			
A.0. Registration/enrollment completed	04001			
A.1. Medical histories taken	04002			
A.2 Initial exams given	04003			
A.3 Laboratory tests performed ▲	04004			
a. In Clinic	40041			
b. Outside	40042			
A.4 Contraceptives distributed to new acceptors ▲	04005			
a. IUD's	08001			
b. Oral	08002			
c. Condoms	08003			
d. Foam	08004			
e. Diaphragms	08005			
f. Creams and Jellies	08006			
g. Rhythm charts	08007			
h. Sterilizations performed ▲	08008			
1. Male	15001			
2. Female	15002			

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ACTIVITY DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 6 (1) PG 2 OF 5 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) ____ SOURCE ____

SERVICE PROVIDER (7 8) ____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ____

ACTIVITY	CODE	NO. UNITS OR ACTIVITIES PERFORMED	PERSONS OR PATIENTS SERVED	REMARKS
i. Other (Specify)	08009			
A.5. Infertility patients ▲	04006			
a. Treated	40061			
b. Referred	40062			
A.6. Patients with Medical Problems ▲	04007			
a. Treated	40071			
b. Referred	40072			
A.7. Contraceptives distributed for re-supply ▲	04008			
Orals ▲	09001			
clinic	16001			
other	16002			
Condoms ▲	09002			
clinic	17001			
other	17002			
Foam ▲	09003			
clinic	18001			
other	18002			
Creams-Jellies ▲	09004			
clinic	19001			
other	19002			

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ACTIVITY DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 6 (1) PG 3 OF 5 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) _____ SOURCE _____

SERVICE PROVIDER (7 8) _____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF _____

ACTIVITY	CODE	NO. UNITS OR ACTIVITIES PERFORMED	PERSONS OR PATIENTS SERVED	REMARKS
Rhythm Supplies ▲	09005			
clinic	20001			
other	20002			
Other (specify) ▲	09006			
clinic	21001			
other	21002			
A.8 Medical follow-up ▲	09009			
a. IUD ▲	10001			
1. Routine check	90001			
2. Problem case	90002			
b. Oral Contraceptives ▲	10002			
1. Regular check	90003			
2. Problem case	90004			
c. Diaphragms ▲	10003			
1. Regular check	90005			
2. Problem case	90006			
d. Regular physical	10004			
B. Educational and Social ▲	20001			
1. New patients recruited ▲	05001			
a. Personal contact	11002			
b. Pamphlets-written material	11001			

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ACTIVITY DISTRIBUTION
WORKSHEET NO 6 (1) PG 4 OF 5 BY ___ DATE ___

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

ACTIVITY	CODE	NO. UNITS OR ACTIVITIES PERFORMED	PERSONS OR PATIENTS SERVED	REMARKS
2. Specific Family Planning Information Consultation ▲	05002			
a. Pamphlets distributed	90007			
b. Meetings held	90008			
c. Individual contacts	90009			
d. Other (specify)	11004			
3. Continuation follow-up visits made ▲	05003			
a. Reminders	11005			
b. Missed appointments	11006			
4. Logistical assistance ▲	05004			
a. Person/rides given	90011			
b. Babysitting incidents	90012			
c. Other (specify)	90013			
5. Non F.P. Consultation ▲	05005			
a. Nutritional	11007			
b. Social	11008			
c. Other	11009			
II. SERVICE SUPPORTIVE	01002			
C. Community Involvement ▲	03001			
1. Community Support ▲	06001			
(a) releases issued	90014			
(b) speeches made	90015			

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ACTIVITY DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 6 (1) PG 5 OF 5 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

ACTIVITY	CODE	NO. UNITS OR ACTIVITIES PERFORMED	PERSONS OR PATIENTS SERVED	REMARKS
(c) meetings held	90016			
(d) key persons contacted	90017			
2. Community Recruitment ▲	06002			
(a) persons contacted	90018			
(b) persons recruited to help ▲	90019			
(i) full-time	90020			
(ii) part-time	90021			
(c) persons endorsing project	90022			
3. Community Participation ▲	06003			
(a) volunteer workers engaged ▲	90023			
(i) full-time	90024			
(ii) part-time	90025			
4. Organizational Coordination ▲	06004			
(a) other groups contacted	90026			
(b) joint meetings held	90027			
D. Management and Administration ▲	03002			
1. Personnel Development ▲	07002			
(a) In Clinic Training Sessions	13001			
(b) Outside Training Sessions	13002			
(c) Conferences/Workshops	13003			

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LABORATORY ACTIVITY DISTRIBUTION

WORKSHEET NO 6A (1) PG 1 OF 1 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

CODE	PROCEDURE	NO. PERFORMED	PATIENTS SERVED	UNIT COST
14004	-HEMATOCRIT			
15004	URINALYSIS FOR SUGAR ALBUMEN			
16004	HEMAGGLUTINATION - INHIBITION (RUBELLA)			
17004	CERVICAL/RECTAL CULTURE FOR GONORRHEA			
18004	PAPANICOLAOU SMEAR			
20004	SEROLOGY FOR SYPHILIS			
21004	SICKLE CELL			
22004				
23004				

INSTRUCTIONS FOR COMPLETION OF WORKSHEET NO. 7

COST/TIME DISTRIBUTION

This worksheet will be used directly by key-punch operators and should be as accurate and clear as possible. Reference refers to the worksheet where the initial entry or figures are set down. This worksheet is a further distribution of either personnel time or a cost category. When a cost distribution is being made, blocks 14, 15, 16, and 17 need not be filled out. In the case of personnel time distribution, blocks 16 and 17 indicate the hours that will be distributed among the various activities. In the case of a cost distribution, blocks 18, 19,20,21, and 22 indicate the amount of money that will be distributed among the various activities. Those activities with the black triangle are total or subtotal items and should not be included if a more detailed breakdown is entered. For control purposes the box to the right of the distribution can be used as a starting point during the interview. For example, in filling out a time distribution work sheet for a doctor who spends ten hours on "Group A-Direct Provision of Family Planning/Medical

Services Activities", the total number 10 would be put on line 02001 to the right of the distribution column. An attempt would then be made to break down the ten hours among the A activities; if this could not be done, then the ten hours would be moved over to the distribution column.

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COST/TIME DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/7

WORKSHEET NO 7 (1) PG 1 OF 5 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

ACTIVITY	CODE	DIST
I. Service-related ▲	01001	
A. Direct provision of family planning/ medical services ▲	02001	
A.0. Registration	04001	
A.1. Medical history and records	04002	
A.2. Initial medical examinations	04003	
A.3. Laboratory tests	04004	
A.4. Initial contraceptives ▲	04005	
a. IUD's	08001	
b. Oral contraceptives	08002	
c. Condoms	08003	
d. Foam	08004	
e. Diaphragms	08005	
f. Spermicidal creams and jellies	08006	
g. Rhythm charts	08007	
h. Sterilizations ▲	08008	
Male	15001	
Female	15002	
i. Other	08009	
A.5. Infertility treatment or referral	04006	
A.6. Medical treatment or referral	04007	

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COST/TIME DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 7 (1) PG 2 OF 5 BY ___ DATE ___

ION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

RVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

T CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

A.7. Contraceptive re-supply ▲	04008			
a. Oral Contraceptives ▲	09001			
Clinic	16001			
Other	16002			
b. Condoms ▲	09002			
Clinic	17001			
Other	17002			
c. Foam ▲	09003			
Clinic	18001			
Other	18002			
d. Spermicidal creams and Jellies ▲	09004			
Clinic	19001			
Other	19002			
e. Rhythm Charts ▲	09005			
Clinic	20001			
Other	20002			
f. Other ▲	09006			
Clinic	21001			
Other	21002			

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COST/TIME DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 7 (1) PG 3 OF 5 BY ___ DATE ___

REGION (2) STRATA (3 4) GRANTEE (5 6) ___ SOURCE ___

SERVICE PROVIDER (7 8) ___ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ___

A.8. Medical follow-up & reexamination ▲	04009		
a. IUD's	10001		
b. Oral contraceptives	10002		
c. Diaphragms	10003		
d. Routine physical	10004		
B. Educational and Social Services ▲	2002		
B.1. New patient recruitment (Outreach) ▲	05001		
a. pamphlets and written materials	11001		
b. personal contact	11002		
B.2. Specific family planning information/ consultation ▲	05002		
a. clinic	11003		
b. Other	11004		
B.3. Continuation follow-up ▲	05003		
a. Reminders	11005		
b. Missed Appointments	11006		
B.4. Logistical Assistance	05004		

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COST/TIME DISTRIBUTION

OMB NO. 68-S71016
APPROVAL EXPIRES 4/30/72

WORKSHEET NO 7 (1) PG 4 OF 5 BY ____ DATE ____

REGION (2) STRATA (3 4) GRANTEE (5 6) ____ SOURCE ____

SERVICE PROVIDER (7 8) ____ NO. CLINICS (9 10)

COST CATEGORY (11 12 13) LIKE ITEMS (14 15) HRS. PER WK (16 17)

AMOUNT PAID (18 19 20 21 22) TYPE (23) UNITS (25) REF ____

B.5. Non-Contraceptive Consultation ▲	05005		
a. Nutritional	11007		
b. Social	11008		
c. Other	11009		
II. Service-Supportive ▲	01002		
C. Community involvement ▲	03001		
C.1. Community support ▲	06001		
a. public relations	90014		
b. political action	90015		
C.2. Community recruitment	06002		
C.3. Community participation	06003		
C.4. Organizational coordination	06004		
D. Management and Administration ▲	03002		
D.1. Data records	07001		
D.2. Personnel development	07002		
a. in-house training	13001		
b. offsite training	13002		
c. conferences and workshops	13003		
d. self-improvement	13004		
D.3. Planning and evaluation	07003		
D.4. Administrative coordination	07004		
D.5. General management and administration ▲	07005		
a. Personnel	14001		

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COST/TIME DISTRIBUTION

OMB NO. 68-S71016
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WORKSHEET NO [7] (1) PG 5 OF 5 BY ____ DATE ____

REGION [ ] (2) STRATA [ ][ ] (3 4) GRANTEE [ ][ ] (5 6) _____ SOURCE _____

SERVICE PROVIDER [ ][ ] (7 8) _____ NO. CLINICS [ ][ ] (9 10)

COST CATEGORY [ ][ ][ ] (11 12 13) LIKE ITEMS [ ][ ] (14 15) HRS. PER WK [ ][ ] (16 17)

AMOUNT PAID [ ][ ][ ][ ][ ] (18 19 20 21 22) TYPE [ ] (23) UNITS [ ] (25) REF _____

b. Supplymanagement ▲	14002		
(1) medical supplies	22001		
(2) other supplies	22002		
c. fiscal management	14003		
d. facilities management	14004		
e. equipment management ▲	14005		
(1) medical equipment	23001		
(2) other equipment	23002		
f. general supervision ▲	14006		
(1) medical supervision	24001		
(2) other supervision	24002		

TYPICAL GRANTEE TABLES AND FOOTNOTES

TABLE 1

SUMMARY TOTAL PROGRAM COST DATA

(0)	(1)	(2)
ITEM	AMOUNT	PERCENT OF TOTAL PROGRAM COST
(1) BUDGETED COST	$ 163436.	90.4 %
(2) UNBUDGETED COST	$ 17446.	9.7 %
(3) TOTAL PROGRAM COST	$ 180682.	100.0 %

TABLE II

DIRECT COST OF DIRECT PROVISION OF FAMILY PLANNING/MEDICAL SERVICES
AND TOTAL PROGRAM COST BY TYPE OF PATIENT

(0) PATIENT TYPE	(1) NUMBER OF PATIENTS	(2) PERCENT OF TOTAL PATIENTS	(3) DIRECT FAMILY PLANNING/ MEDICAL COSTS AMOUNT	(4) DIRECT FAMILY PLANNING/ MEDICAL COSTS PER PATIENT	(5) TOTAL PROGRAM COST AMOUNT	(6) TOTAL PROGRAM COST PER PATIENT
(1) NEW PATIENTS	1475	51.7 %	$ 61706. EST.	$ 41.83 EST.	$ 100972. EST.	$ 68.46 EST.
(2) CONTINUING PATIENTS	1378	48.3 %	$ 53156. EST.	$ 38.57 EST.	$ 79910. EST.	$ 57.99 EST.
(3) UNDUPLICATED PATIENTS	2853	100.0 %	$ 114862.	$ 40.26	$ 180882.	$ 63.40

TABLE III

TOTAL PROGRAM COST BY VISIT TYPE

(0) VISIT TYPE	(1) NUMBER OF PATIENTS SERVED	(2) SPECIFIC PROGRAM COST	(3) GENERAL PROGRAM COST	(4) TOTAL PROGRAM COST	(5) COST PER PATIENT SERVED	(6) NUMBER OF VISITS	(7) VISITS PER PATIENT	(8) COST PER VISIT
(1) INITIAL VISIT	1475	$ 58463.	$ 42509. EST.	$ 100972. EST.	$ 68.46 EST.	1475	1.00	$ 68.46 EST.
(2) RESUPPLY VISIT	0 N/A	$ 6243.	$ 15110. EST.	$ 21353. EST.	$ .00 N/A	0 N/A	.00 N/A	$ .00 N/A
(3) INFERTILITY VISIT	0	$ 0.	$ 0.	$ 0.	$ .00	0	.00	$ .00
(4) MEDICAL TREATMENT OR REFERRAL	0 N/A	$ 4309.	$ 16235. EST.	$ 20544. EST.	$ .00 N/A	0 N/A	.00 N/A	$ .00 N/A
(5) MEDICAL FOLLOW-UP	1586	$ 7973.	$ 30040. EST.	$ 38013. EST.	$ 23.97 EST.	0 N/A	.00 N/A	$ .00 N/A
(6) TOTAL	2853	$ 76988.	$ 103894.	$ 180882.	$ 63.40	4611	1.62	$ 39.14

TABLE IV

DISTRIBUTION OF DIRECT COSTS BY ACTIVITY AREA

(0)	(1)	(2)	(3)	(4)	(5)
(0) ITEM	AMOUNT	DIRECT PROVISION OF FAMILY PLANNING/ MEDICAL SERVICES	EDUCATIONAL AND SOCIAL SERVICES	COMMUNITY INVOLVEMENT	MANAGEMENT AND ADMINISTRATION
(1) BUDGETED COST	$ 163436.	$ 107049.	$ 23612.	$ 6690.	$ 26085.
(2) UNBUDGETED COST	$ 17446.	$ 7813.	$ 0.	$ 0.	$ 9633.
(3) TOTAL DIRECT COST	$ 180882.	$ 114862.	$ 23612.	$ 6690.	$ 35718.
(4) PERCENT OF TOTAL DIRECT COST	100.0 %	63.5 %	13.1 %	3.7 %	19.8 %
(5) COST PER UNDUPLICATED PATIENT	$ 63.40	$ 40.26	$ 8.28	$ 2.34	$ 12.52
(6) COST PER VISIT	$ 39.23	$ 24.91	$ 5.12	$ 1.45	$ 7.75

TABLE V

DISTRIBUTION OF DIRECT COST OF PROVISION OF FAMILY PLANNING/MEDICAL SERVICES

(0) ACTIVITY	(1) DIRECT COST	(2) PERCENT OF DIRECT PROVISION OF FAMILY PLANNING/ MEDICAL SERVICES	(3) PERCENT OF TOTAL PROGRAM COST
(1) REGISTRATION AND MEDICAL RECORDS	$ 26859.	23.4 %	14.9 %
(2) INITIAL EXAMINATION/ CONTRACEPTIVE SUPPLY	$ 33156.	28.9 %	18.4 %
(3) LABORATORY TESTS	$ 27049.	23.6 %	15.0 %
(4) INFERTILITY TREATMENT	$ 0.	.0 %	.0 %
(5) MEDICAL TREATMENT	$ 2698.	2.4 %	1.5 %

TABLE V

DISTRIBUTION OF DIRECT COST OF PROVISION OF FAMILY PLANNING/MEDICAL SERVICES

(0)	(1)	(2)	(3)
(0) ACTIVITY	DIRECT COST	PERCENT OF DIRECT PROVISION OF FAMILY PLANNING/ MEDICAL SERVICES	PERCENT OF TOTAL PROGRAM COST
(6) CONTRACEPTIVE RESUPPLY	$ 6243.	5.5 %	3.5 %
(7) MEDICAL FOLLOW-UP	$ 4179.	3.7 %	2.3 %
(8) UNSPECIFIED	$ 14678.	12.8 %	8.1 %
(9) TOTAL COST OF DIRECT PROVISION OF FAMILY PLANNING/ MEDICAL SERVICES	$ 114862.	100.0 %	63.5 %

TABLE VI

DISTRIBUTION OF DIRECT COST OF EDUCATIONAL AND SOCIAL SERVICES

(0)	(1)	(2)	(3)
(0) ACTIVITY	DIRECT COST	PERCENT OF DIRECT EDUCATIONAL AND SOCIAL SERVICE COST	PERCENT OF TOTAL PROGRAM COST
(1) NEW PATIENT RECRUITMENT	$ 6511.	27.6 %	3.6 %
(2) SPECIFIC FAMILY PLANNING INFORMATION	$ 7713.	32.7 %	4.3 %
(3) CONTINUATION AND FOLLOW-UP	$ 4867.	20.6 %	2.7 %
(4) LOGISTICAL ASSISTANCE	$ 4517.	19.2 %	2.5 %
(5) NUTRITIONAL COUNSELING	$ 0.	.0 %	.0 %
(6) SOCIAL COUNSELING	$ 0.	.0 %	.0 %
(7) UNSPECIFIED	$ 4.	.0 %	.0 %
(8) TOTAL EDUCATIONAL AND SOCIAL SERVICES COST	$ 23612.	100.0 %	13.1 %

TABLE VII

DISTRIBUTION OF SELECTED MANAGEMENT AND ADMINISTRATION DIRECT COSTS

(0)	(1)	(2)	(3)	(4)	(5)
(0) ACTIVITY	PERSONNEL COST	NON-PERSONNEL COST	MANAGEMENT AND ADMINISTRATION DIRECT COST	PERCENT OF TOTAL MANAGEMENT AND ADMINISTRATION DIRECT COST	PERCENT OF TOTAL PROGRAM COST
(1) DATA AND RECORDS	$ 3427.	$ 0.	$ 3427.	9.6 %	1.9 %
(2) PERSONNEL DEVELOPMENT	$ 3419.	$ 231.	$ 3650.	10.2 %	2.0 %
(3) FISCAL MANAGEMENT	$ 1428.	$ 0.	$ 1428.	4.0 %	.8 %
(4) OTHER	$ 12323.	$ 14890.	$ 27213.	76.2 %	15.1 %
(5) TOTAL DIRECT COST OF MANAGEMENT AND ADMINISTRATION	$ 20597.	$ 15121.	$ 35718.	100.0 %	19.8 %

TABLE VIII

ANNUAL TOTAL PROGRAM COST BY CONTRACEPTIVE METHOD

(0) METHOD	(1) NUMBER OF CONTRACEPTING PATIENTS	(2) PERCENT OF CONTRACEPTING PATIENTS	(3) COST OF BASIC SERVICES	(4) COST OF METHOD SPECIFIC SERVICES	(5) TOTAL COST	(6) ANNUAL COST PER CONTRACEPTING PATIENT
(1) ORAL CONTRACEPTIVE	2142 EST.	75.1 % EST.	$ 99495. EST.	$ 29834. EST.	$ 129329. EST.	$ 60.38 EST.
(2) INTRAUTERINE DEVICE (IUD)	608 EST.	21.3 % EST.	$ 28219. EST.	$ 17655. EST.	$ 45874. EST.	$ 75.45 EST.
(3) DIAPHRAGM	43 EST.	1.5 % EST.	$ 1987. EST.	$ 72. EST.	$ 2059. EST.	$ 47.88 EST.
(4) OTHER	60 EST.	2.1 % EST.	$ 2782. EST.	$ 838. EST.	$ 3620. EST.	$ 60.33 EST.
(5) TOTAL	2853	100.0 %	$132483. EST.	$ 48399. EST.	$ 180882. EST.	$ 63.40 EST.

TABLE IX

DIRECT COST OF STERILIZATIONS

(0)	(1)	(2)	(3)
(0) TYPE	DIRECT COST	PATIENTS SERVED	COST PER PATIENT
(1) MALE STERILIZATION	$ 0.	0	$ .00
(2) FEMALE STERILIZATION	$ 0.	0	$ .00
(3) ALL STERILIZATIONS	$ 0.	0	

TABLE X

DIRECT AND TOTAL PROGRAM COST FOR NEW PATIENT RECRUITMENT

(0)	(1)	(2)	(3)	(4)
(0) ACTIVITY	DIRECT COST	DIRECT COST PER NEW PATIENT	TOTAL PROGRAM COST	TOTAL PROGRAM COST PER NEW PATIENT
(1) RECRUITMENT	$ 6511.	$ 4.41	$ 9255.	$ 6.27
(2) INFORMATION AND COUNSELING	$ 7713.	$ 5.23	$ 11119.	$ 7.54
(3) TOTAL	$ 14224.	$ 9.64	$ 20374.	$ 13.81

TABLE XI

TOTAL DIRECT COST AND PROGRAM COST FOR PATIENT RETENTION

(0) ACTIVITY	(1) DIRECT COST	(2) DIRECT COST PER CONTINUING PATIENT	(3) DIRECT COST PER REVISIT	(4) TOTAL COST	(5) TOTAL PROGRAM COST PER CONTINUING PATIENT	(6) TOTAL PROGRAM COST PER REVISIT
(1) CONTINUATION FOLLOW-UP	$ 4867.	$ 3.53	$ 1.55	$ 7016.	$ 5.09	$ 2.24
(2) LOGISTICAL ASSISTANCE	$ 4517.	$ 3.28	$ 1.44	$ 6512.	$ 4.73	$ 2.07
(3) TOTAL	$ 9384.	$ 6.81	$ 2.99	$ 13528.	$ 9.82	$ 4.31

TAPLE XII

PERSONNEL COST AS A PERCENTAGE OF ACTIVITY AREA COSTS

(0)	(1)	(2)	(3)	(4)	(5)
(0) ITEM	DIRECT PROVISION FAMILY PLANNING/ MEDICAL SERVICES	EDUCATIONAL AND SOCIAL SERVICES	COMMUNITY INVOLVEMENT	MANAGEMENT AND ADMINISTRATION	TOTAL PROGRAM COST
(1) BUDGETED: TOTAL COST	$ 107049.	$ 23612.	$ 6690.	$ 26085.	$ 163436.
PERSONNEL COST	$ 72720.	$ 23315.	$ 5798.	$ 20597.	$ 122430.
(2) UNBUDGETED: TOTAL COST	$ 7813.	$ 0.	$ 0.	$ 9633.	$ 17446.
PERSONNEL COST	$ 0.	$ 0.	$ 0.	$ 0.	$ 0.
(3) TOTAL COST BUDGETED & UNBUDGETED	$ 114862.	$ 23612.	$ 6690.	$ 35718.	$ 180882.
(4) TOTAL PERSONNEL COST BUDGETED & UNBUDGETED	$ 72720.	$ 23315.	$ 5798.	$ 20597.	$ 122430.
(5) PERSONNEL COST AS A PERCENTAGE OF ACTIVITY AREA COSTS	63.3 %	98.7 %	86.7 %	57.7 %	67.7
(6) PERSONNEL COST PER UNDUPLICATED PATIENT	$ 25.49	$ 8.17	$ 2.03	$ 7.22	$ 42.9

TABLE XII

PERSONNEL COST AS A PERCENTAGE OF ACTIVITY AREA COSTS

(0)	ITEM	(1) DIRECT PROVISION FAMILY PLANNING/ MEDICAL SERVICES	(2) EDUCATIONAL AND SOCIAL SERVICES	(3) COMMUNITY INVOLVEMENT	(4) MANAGEMENT AND ADMINISTRATION	(5) TOTAL PROGRAM COST
(7)	PERSONNEL COST PER VISIT	$ 15.77	$ 5.06	$ 1.26	$ 4.47	$ 26.55
(8)	PERSONNEL COST AS A PERCENTAGE OF TOTAL PROGRAM COST	40.2 %	12.9 %	3.2 %	11.4 %	67.7 %

TABLE XIII

DISTRIBUTION OF PERSONNEL COSTS BY JOB CLASSIFICATION AND TYPE OF EMPLOYMENT

(0)	(1)	(2)	(3)	(4)	(5)
(0) CLASSIFICATION	COST	PERCENT OF TOTAL PERSONNEL COST	PERCENT OF CLASSIFICATION COST FOR		
			FULL-TIME PERSONNEL	PART-TIME PERSONNEL	VOLUNTEERS/ UNBUDGETED
(1) ADMINISTRATORS/MANAGERS	$ 3621.	3.0 %	.0 %	100.0 %	.0 %
(2) BABYSITTERS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(3) BOARD/COORDINATING COUNCIL MEMBERS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(4) BOOKKEEPERS/ ACCOUNTANTS	$ 863.	.7 %	.0 %	100.0 %	.0 %
(5) CLERKS:APPOINTMENT	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(6) CLERKS:INTAKE	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(7) CLERKS:MEDICAL RECORDS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE

TABLE XIII

DISTRIBUTION OF PERSONNEL COSTS BY JOB CLASSIFICATION AND TYPE OF EMPLOYMENT

(0)	(1)	(2)	(3)	(4)	(5)
(0) CLASSIFICATION	COST	PERCENT OF TOTAL PERSONNEL COST	PERCENT OF CLASSIFICATION COST FOR		
			FULL-TIME PERSONNEL	PART-TIME PERSONNEL	VOLUNTEERS/ UNBUDGETED
(8) CLERKS/TYPISTS	$ 6228.	5.1 %	100.0 %	.0 %	.0 %
(9) CLINICAL PHYSICIANS	$ 17743.	14.5 %	.0 %	100.0 %	.0 %
(10) CUSTODIANS/HANDYMEN	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(11) DRIVERS	$ 3094.	2.6 %	.0 %	100.0 %	.0 %
(12) FUND RAISERS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(13) HEALTH EDUCATORS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(14) NEIGHBORHOOD/COMMUNITY WORKERS/HEALTH AIDES	$ 8016.	6.6 %	100.0 %	.0 %	.0 %

TABLE XIII

DISTRIBUTION OF PERSONNEL COSTS BY JOB CLASSIFICATION AND TYPE OF EMPLOYMENT

(0)	(1)	(2)	(3)	(4)	(5)
(0) CLASSIFICATION	COST	PERCENT OF TOTAL PERSONNEL COST	PERCENT OF CLASSIFICATION COST FOR		
			FULL-TIME PERSONNEL	PART-TIME PERSONNEL	VOLUNTEERS/ UNBUDGETED
(15)NURSES:AIDES,ORDERLIES &CLINIC ASSISTANTS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(16)NURSES:PRACTICAL	$ 6869.	5.6 %	100.0 %	.0 %	.0 %
(17)NURSES:REGISTERED AND PUBLIC HEALTH	$ 67064.	54.8 %	.0 %	100.0 %	.0 %
(18)NUTRITIONISTS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(19)OFFICE ASSISTANTS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(20)OTHER:COMMUNITY INVOLVEMENT	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(21)OTHER:EDUCATIONAL AND SOCIAL SERVICES	$ 7729.	6.3 %	100.0 %	.0 %	.0 %

TABLE XIII

DISTRIBUTION OF PERSONNEL COSTS BY JOB CLASSIFICATION AND TYPE OF EMPLOYMENT

(0)	(1)	(2)	(3)	(4)	(5)
(0) CLASSIFICATION	COST	PERCENT OF TOTAL PERSONNEL COST	PERCENT OF CLASSIFICATION COST FOR		
			FULL-TIME PERSONNEL	PART-TIME PERSONNEL	VOLUNTEERS/ UNBUDGETED
(22)OTHER:MANAGEMENT AND ADMINISTRATION	$ 1204.	1.0 %	.0 %	100.0 %	.0 %
(23)OTHER:FAMILY PLANNING/ MEDICAL SERVICES	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(24)PHARMACISTS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(25)PSYCHOLOGISTS:CLINICAL	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(26)PUBLIC INFORMATION OFFICER	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(27)RECEPTIONISTS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(28)SECRETARIES	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE

TABLE XIII

DISTRIBUTION OF PERSONNEL COSTS BY JOB CLASSIFICATION AND TYPE OF EMPLOYMENT

(0)	(1)	(2)	(3)	(4)	(5)
(0) CLASSIFICATION	COST	PERCENT OF TOTAL PERSONNEL COST	PERCENT OF CLASSIFICATION COST FOR		
			FULL-TIME PERSONNEL	PART-TIME PERSONNEL	VOLUNTEERS/ UNBUDGETED
(29) SOCIAL WORKERS AND COUNSELORS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(30) TECHNICIANS:LABORATORY	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(31) TECHNICIANS:X-RAY	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(32) TRAINERS	$ 0. NONE	.0 % NONE	.0 % NONE	.0 % NONE	.0 % NONE
(33) TOTAL FOR ALL CLASSIFICATIONS	$ 122430.	100.0 %	23.6 %	76.5 %	.0 %

TABLE XIV

DISTRIBUTION OF PERSONNEL COST BY SELECTED ACTIVITIES FOR CLINICAL PHYSICIANS

(0)	(0) ACTIVITY	(1) COST	(2) PERCENT OF TOTAL COST FOR CATEGORY
(1)	INITIAL MEDICAL EXAMINATIONS AND INITIAL SUPPLY OF CONTRACEPTIVES	$ 9504.	53.6 %
(2)	LABORATORY TESTS	$ 0.	.0 %
(3)	INFERTILITY TREATMENT OR REFERRAL	$ 0.	.0 %
(4)	MEDICAL TREATMENT OR REFERRAL	$ 1774.	10.0 %
(5)	RESUPPLY OF CONTRACEPTIVES	$ 0.	.0 %
(6)	MEDICAL FOLLOW-UP AND REEXAMINATION	$ 4179.	23.6 %
(7)	EDUCATIONAL AND SOCIAL SERVICES	$ 0.	.0 %
(8)	COMMUNITY INVOLVEMENT	$ 0.	.0 %

TABLE XIV

DISTRIBUTION OF PERSONNEL COST BY SELECTED ACTIVITIES
FOR CLINICAL PHYSICIANS

(0)	(0) ACTIVITY	(1) COST	(2) PERCENT OF TOTAL COST FOR CATEGORY
(9)	MANAGEMENT AND ADMINISTRATION	$ 2284.	12.9 %
(10)	OTHER ACTIVITIES	$ 2.	.0 %
(11)	TOTAL FOR CLINICAL PHYSICIAN	$ 17743.	100.0 %

TABLE XV

DISTRIBUTION OF PERSONNEL COST BY SELECTED ACTIVITIES FOR REGISTERED AND PUBLIC HEALTH NURSES

(0)	(1)	(2)
(0) ACTIVITY	COST	PERCENT OF TOTAL COST FOR CATEGORY
(1) REGISTRATION/ENROLLMENT AND MEDICAL HISTORY AND RECORDS	$ 19991.	29.8 %
(2) INITIAL MEDICAL EXAMINATIONS AND INITIAL SUPPLY OF CONTRACEPTIVES	$ 14624.	21.8 %
(3) LABORATORY TESTS	$ 10653.	15.9 %
(4) INFERTILITY TREATMENT OR REFERRAL	$ 0.	.0 %
(5) MEDICAL TREATMENT OR REFERRAL	$ 0.	.0 %
(6) RESUPPLY OF CONTRACEPTIVES	$ 0.	.0 %
(7) MEDICAL FOLLOW-UP AND REEXAMINATION	$ 0.	.0 %
(8) SPECIFIC FAMILY PLANNING INFORMATION/CONSULTATION	$ 3942.	5.9 %

TABLE XV

DISTRIBUTION OF PERSONNEL COST BY SELECTED ACTIVITIES FOR REGISTERED AND PUBLIC HEALTH NURSES

(0)	(0) ACTIVITY	(1) COST	(2) PERCENT OF TOTAL COST FOR CATEGORY
(9)	CONTINUATION FOLLOW-UP	$ 0.	.0 %
(10)	LOGISTICAL ASSISTANCE	$ 0.	.0 %
(11)	NON-FAMILY PLANNING CONSULTATION	$ 0.	.0 %
(12)	COMMUNITY INVOLVEMENT	$ 4462.	6.7 %
(13)	MANAGEMENT AND ADMINISTRATION	$ 8730.	13.0 %
(14)	NEW PATIENT RECRUITMENT	$ 4672.	7.0 %
(15)	TOTAL FOR REGISTERED AND PUBLIC HEALTH NURSES	$ 67074.	100.0 %

TABLE XVI

DISTRIBUTION OF PERSONNEL COST BY SELECTED ACTIVITIES
FOR MANAGERS AND ADMINISTRATORS

(0)	ACTIVITY	(1) COST	(2) PERCENT OF TOTAL COST FOR CATEGORY
(1)	DIRECT PROVISION OF FAMILY PLANNING/MEDICAL SERVICES	$ 0.	.0 %
(2)	EDUCATIONAL AND SOCIAL SERVICES	$ 0.	.0 %
(3)	COMMUNITY INVOLVEMENT	$ 1336.	37.0 %
(4)	MANAGEMENT AND ADMINISTRATION	$ 2280.	63.1 %
(5)	OTHER ACTIVITIES	$ 1.	.1 %
(6)	TOTAL FOR MANAGERS AND ADMINISTRATOR	$ 3617.	100.0 %

FOOTNOTES TO TABLES

Table I:

(1,0) Not the same as the program's "regular annual budget", see General Definitions in the Descriptive Guide to Tables.

(3,0) Amount for study period.

Table II:

(1,0) The number of persons making their initial visit to the program during the study period.

(2,0) The number of old patients based upon revisit first this year.

(3,0) The sum of new patients (initial visit) new to program, and continuing patients (revisit first this year).

(1,3) The sum of the direct cost for the provision of the following services to a new patient: registration and medical history, initial examination, initial contraceptive supply, and laboratory tests. Registration and medical history and records cost, and unspecified costs were distributed between new and continuing patients by the ratio of first visits to total visits where available and by the ratio of other new and continuing costs where visit counts were not available. Laboratory test cost for new patients was determined by the number of tests and cost per test, with the balance applying to continuing patients. Where this data was not available, lab test cost was treated the same as the others above.

(1,4) The cost of the direct new patient services divided by the number of new patients.

(1,5) The total program cost (direct and support) for the new patient services listed in (1,3). Cost of registration and medical history and records, laboratory tests and unspecified costs were treated in the same manner as (1,3).

(1,6) The total program cost for new patient services divided by the number of new patients.

(2,3) The direct cost for the following services provided to continuing patients: infertility treatment, medical treatment or referral, resupply of contraceptives, medical follow-up and re-examination. Registration and medical history and records, laboratory test and unspecified costs were treated in the same manner as (1,3).

(2,4) The direct cost for continuing patient services divided by the number of continuing patients.

(2,5) The total program cost for the continuing patient services listed in (2,3) divided by the number of continuing patients.

(3,3) The total direct family planning/medical services cost.

(3,4) The direct cost of family planning/medical services divided by the unduplicated patient count.

(3,5) The total program cost for the provision of family planning/medical services and includes the allocation of all support costs.

(3,6) The total program cost per unduplicated patient.

(0,2) Includes the costs that are associated with the type of visit.

Table III:

(0,3) Includes a pro-ration of those costs which are common to all visits, including registration and enrollment, medical history, laboratory services, medical malpractice insurance, medical supplies and medical equipment. Pro-ration was based on the ratio of the particular visits to total visits, or on ratio of moneys included in specific program cost where visit counts are not available.

(0,5) The total program cost divided by the number of patients making the type of visit.

(0,7) The number of visits divided by the number of patients.

(0,8) The cost per patient multiplied by the number of visits per patient.

(2,3) Does not include a pro-ration of basic laboratory costs.

(3,3) Does not include a pro-ration of basic laboratory costs.

(6,1) The actual total unduplicated patient count (based on the assumption that all patients must make at least one of these visits indicated during the study period). This is not the sum of the column since some visits may go unrecorded and some patients may make more than one type of visit.

Table IV:

(0,2)(0,3)(0,4)(0,5) Includes all of the activities for each of the activity groups, see Section IV for a detailed listing.

(3,1) The sum of the direct cost for the four activity areas is equal to the total program cost.

Table V:

(0,2) The cost of performing the activity as a percentage of the total cost for the Direct Provision of Family Planning Services Group A Activities.

(0,3) The cost of performing the activity as a percentage of the total program cost.

Table VI:

(0,2) The cost of performing the activity as a percentage of the total cost for Direct Educational and Social Services Group B Activities.

(0,3) The cost of performing the activity as a percentage of the total program cost.

Table VII:

(0,1) Cost of personnel time for each of the activities.

(0,3) Sum of (0,1) and (0,2).

(0,4) Cost of performing the activity as a percentage of management and administration direct cost.

(0,5) Cost of performing the activity as a percentage of the total program cost.

(1,2) Includes the rental of data processing equipment or the cost of computer time.

(2,2) Includes the cost of training materials.

(3,2) Includes the cost of accounting or auditing services provided by outside firms.

(4,0) Includes all other management and administration activities (see Section V).

(4,2) Includes use of space, and non-medical supplies and equipment.

Table VIII:

(0,1) Based on the project's records of contraceptive patients by type, or if unavailable, on a projection based upon the proportion of new patients by contraceptive method. This does not include infertility patients.

(0,2) The proportion of contracepting patients by method, relative to the total number of contracepting patients.

(0,3) Cost of basic services includes the method specific proportion of those costs common to all contraceptive patients (registration, enrollment, medical history, initial examination, laboratory tests and routine physical examinations).

(0,4) Includes the cost of services directly related to the contraceptive method (initial supply/insertion, resupply, medical follow-up and re-examination).

(0,5) Sum of basic services plus method specific services.

(0,6) The total cost by method divided by the number of patients using the method during the study period.

(4,0) Other includes all other contraceptive methods such as foam, condoms, creams and jellies, which are frequently used in conjunction with the three primary contraceptive methods and cannot be disaggregated.

(5,1) Differs from the total unduplicated patient count by the number of infertility patients.

(5,5) Differs from total program cost by the cost of infertility treatment, medical malpractice or other insurance, medical supplies other than contraceptives, and medical supervision (where supervision time could not be broken down among contraceptive methods).

Note: Where cost by method for each service was not available, the following procedures were used:

Estimation of basic service cost: The proportion of patients by method was used to allocate the cost of all basic services.

Estimation of method specific cost: The proportion of direct cost for each method was used to allocate the cost of all method specific services. Where this proportion was not available, the proportion of patients by method was used.

Table IX:

No footnotes.

Table X:

(0,1) Direct cost for the performance of the activity.

(0,2) Direct cost divided by the number of new patients.

(0,3) Total program cost for the activity.

(0,4) Total program cost divided by the number of new patients.

Table XI:

(0,1) Direct cost for the activity

(0,2) Direct cost divided by the number of continuing patients.

(0,3) Direct cost divided by the number of revisits.

(0,4) Total program cost for the activity.

(0,5) Total program cost divided by the number of continuing patients.

(0,6) Total program cost divided by the number of revisits.

Table XII:

No footnotes.

Table XIII:

(0,0) Job classification titles for program personnel.

(0,1) Personnel cost for all personnel in the job classification during the study period.

(0,2) Personnel cost for the job classification as a percentage of the total personnel cost for the program during the study period.

(0,3) Proportion of full time personnel cost relative to total personnel costs for the job classification.

(0,4) Proportion of part time personnel costs relative to the total personnel cost for the job classification.

(0,5) Proportion of volunteer or other agency personnel cost (unbudgeted) to the total personnel cost for the job classification.

Note: The sum of (0,3), (0,4) and (0,5) is 100% of the total personnel cost for the job classification.

Table XIV:

(0,1) Personnel cost of clinical physicians for each of the activities.

(0,2) Personnel cost of clinical physicians for each activity relative to the total personnel cost for clinical physicians.

(7,0) Includes all activities in Group B Educational and Social Services.

(8,0) Includes all activities in Group C Community Involvement.

(9,0) Includes all activities in Group D Management and Administration.

(10,0) Includes any activity not specifically identified.

Table XV:

(0,1) Personnel cost of nurses for each of the activities.

(0,2) Personnel cost of nurses relative to total personnel cost for nurses.

(12,0) Includes all activities in Group C Community Involvement.

(13,0) Includes all activities in Group D Management and Administration.

(14,0) Includes any activity not specifically identified.

Table XVI:

No footnotes.